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THE
MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

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The Resources of the United States for Sheep
Husbandry and the Wool Manufacture.

THE ADDRESS OF HON. JOHN L. HAYES.

Continued from Page 73, [Vol. XVI., Md. Far.]

[The address goes on to give many extracts of letters from Mr. J. D. Witham, of West Virginia, who speaks of Mr. Ninian Beall, West Liberty Va., who owns 500 Saxony sheep, and others who own Saxony sheep; also of the large flock of superfine wool sheep of Mr. W. Croskey, of Hope-dale, Harrison County, adjoining the Panhandle region.]

"The above extracts show that our Southern friends who desire to pursue the fascinating pursuit of superfine sheep husbandry may find in our own country breeding animals to start their flocks, thoroughly acclimated, having all the fineness of the original Saxons without their tenderness of constitution, and producing heavier fleeces without loss of fineness of fibre. Thus we find what will be to most of us an unexpected addition to the American resources for sheep husbandry.

To appreciate this American improvement, we must consider the delicacy of the original Saxons. In Germany, they were not only housed during winter and at night, but their barns were actually warmed in severely cold weather. In yeanning time, as Dr. Randall states, they received, and came to require, as much care as human patients. I well remember that nearly all the lambs from my father's flock of imported Saxons required to be suckled by hand.

Immediately connected with this branch of my subject, the merino sheep, is the question of our territorial resources for the further extension of the pastoral-sheep husbandry as a principal or exclusive pursuit; for which, as has been before said, the merino races are especially adapted. The fact must be admitted, that sheep-growing for wool alone is not likely to be ever again profitable in the Northern and Eastern States; for the obvious

reason, that wool can be raised more cheaply on the cheap lands of the West and South, where shelter and winter-feeding are required only occasionally and for brief periods, and where the vegetation is spontaneous. The pastoral-sheep husbandry in prosperous countries has a character of evanescence which is really one of the best proofs of its beneficent results. It first occupies the waste pastures, and then converts them from the domain of the crook to that of the plow. California, with its 6,500,000 sheep, producing 50,000,000 pounds of wool, it is said, has occupied all her available pasture-lands. To supply the deficiency, her wool growers have resorted to the culture of the alfalfa—that wonderful fodder plant which yields from six even to eight tons of hay, and which is preferred by cattle and sheep to any hay whatever. "The Pacific Rural Press" of March last, describing a ranch having 7,000 sheep, says that 1,300 acres sown to alfalfa were cut last year five times, yielding a ton and a half of hay to each acre. In 1876, some 40,500 acres were planted with this clover in California. Under this system, sheep are fed on the ranch instead of the distant hillsides, and four or five times as many can be kept on the same territory. This is the first step to an improved husbandry,—to mixed crops, to mutton sheep, and finally the retirement of the nomadic shepherd to new lands, to be in their turn converted to permanent settlement.

California is but the margin of the Western lands which may be occupied for sheep husbandry. To quote Dr. Latham, there is an area country between the Missouri River and the Pacific coast containing 1,650,000 square miles, or more than a billion of acres, which is one immense pasture ground,—boundless, endless, gateless,—and all of it furnishing winter grazing. This winter grazing, it hardly needs to be said, is the characteristic feature of our continental pastures; the peculiar climatic conditions of the high interior country permitting the rich and abundant grasses, like the "bunch" and "gramma" to be cured while standing.

The vast number of wild graminivorous animals, which have wintered on these plains for ages shows that nature itself has pointed out this country as grazing ground of the continent. Our illustration will suffice to show the infinite resources of that region for sheep husbandry. The valley of the Republican is 250 miles long 100 miles wide, containing 16,000,000 acres. There is not a rod of these 16,000,000 acres, says Dr. Latham, which is not the finest of grazing land, and is not covered with a luxuriant growth of blue buffalo and gramma grasses. All the sheep of California could be pastured in this single valley. A large portion of this region is made available by the Union Pacific Railroad and its branches. Even more valuable grazing lands, I am informed, will be made available by the completion of the Northern Pacific Railroad.—a great national work whose accomplishment would be made certain simply by the extension of the original grant asked for from Congress. With this line completed, sheep and cattle raised on the bunch and gramma pastures could be water borne from the head of Lake Superior to Buffalo, on their way to the markets of Europe, which it is America's destiny to supply with beef and mutton.

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In the ten States of the cotton belt, excluding Texas, there are 2,600,000 sheep, on an area of 267,000,000 acres, or one sheep to a hundred acres. Considering the small number of animals and their inferior character, sheep husbandry, in the proper acceptance of the term, does not exist at the South. And yet the wisest agriculturists of the South admit that merino-sheep husbandry would be a most advantageous adjunct to the cotton culture. Winter-feeding is required but from two to three months; while the flocks must be fed from five to six months at the North. Succulent food can be obtained throughout the year. With nutritious alfalfa and the Bermuda grass, more nutritious even than blue grass; peas, which take the place of clover; rye and oats, which may be pastured in winter, without injury to the crop of grain; turnips, which may be fed from in the field, as in England; and above all, cotton seed, at fifteen cents a bushel,—sheep may be fed at a much lower cost in the South than at the North,

But the resources for a sheep husbandry on a large scale is the immediate question in hand. The pine-lands of the Carolinas, and especially of Georgia, it is believed, are favorably adapted for sheep husbandry on a large scale. Millions of acres of pine-lands upon which the wire grass grows spontaneously, furnishing an excellent pasturage for a large part of the year, can be obtained

at from fifty cents to one dollar an acre. The few week's feed in winter may be furnished by winter oats or turnips, for which the land can be prepared simply by harrowing. General Gordon, of the United States Senate, has recently embarked in sheep husbandry on a large scale upon these lands; and practical gentlemen from the North who have visited this country this summer inform me that they shall follow his example.

We must go to the extreme South for the country which offers, in my judgment, the most hopeful field to the enterprising shepherd who does not fear Mexican depredations or Indian raids. In Texas we find a climate so mild that the sheep thrive absolutely without shelter. Pasturage is afforded throughout the whole year by the indigenous, perennial mesquite grasses, and so abundantly that the store sheep are kept fat throughout the year without any other forage. Pastoral-sheep husbandry is here reduced to a perfect system; and there are absolutely no obstacles to its pursuit as advantageously as in any other country in the world, except the unsettled state of the country, which railroads will soon cure. Emigration and sheep are pouring in from the North and California, and skilled shepherds from Europe and even Australia. Even with its nearly 4,000,000 head, only two counties (Neuces and Starr) are occupied. Texas has an area which exceeds that of the German Empire by 60,000 square miles; and there are 80,000,000 acres of land still unlocated. If two acres are required for one sheep (the usual estimate), and only half the land is fitted for sheep culture, there are still enough unoccupied lands to support 20,000,000. Mr. Emerson says that the wealth of modern times is due to a very few great staples. Let the South, as she can, place Queen Wool by the side of King Cotton in her territory, and she may indeed assert her sovereignty in material resources.

[TO BE CONTINUED.]

An *Exchange* says:—After many experiments, a certain and speedy remedy for burdocks has been discovered in kerosene oil. A small quantity poured into the heart of the plants, directly after cutting, leaves no trace of their existence save a small hole in the earth where they stood. Refined or crude oil will accomplish the purpose equally well.

[We have no doubt but that this remedy would destroy other troublesome plants and shrubs like sassafras and briars—it will cost but little to try it. Who will begin and report results to us? EDs, MD. FAR.]

FARM WORK FOR APRIL.

This is truly the *opening* month of the farmer's labor for the year. It is necessary this month that every farmer should be briskly engaged in forwarding his work. If he falls behind now, he will be behind all the year. Much is now to be done and *immediately*, if he has not been fortunate to have done most of it last month. Plowing is to be pushed on, manure hauled and spread, plaster to be sown, lime to be spread, fences and gates to be put in order or new ones made, ditches to be cleaned out, briars and bushes to be cleaned off the fields and along the fences and ditch-banks. Stock to be particularly cared for at this season. The orchards to be trimmed and the trees dressed with some sort of wash, that will cleanse the bark and destroy insects—a good wash is made of soft soap ashes, a little salt and sulphur, mixed to the consistency of white wash, rather thick and applied to the trunks and larger limbs with a white wash brush, or a mop made of sheep skin with wool on.

There are a great many other little things to be done by way of making a fair start in the year's work, which will suggest themselves from day to day to the thoughtful manager of a farm, and which should be done at once, or a note made in the farm book, that it might not be forgotten when such matters must be attended to or be too late.

OATS.

This crop, if not sown before, should be sown at the first moment the ground permits after it has been well prepared and fertilized. Sow grass seed on the fresh earth after the oats are in; and roll or brush in the seed. Follow with a dressing of three bushels of salt and one of plaster, well mixed, sown on each acre.

GRASS LAND OR PASTURES.

On the pastures, or land intended for mowing, sow on each acre the same mixture as above stated for oat ground. If no salt is used, but which ought to be—do not neglect to sow one bushel of plaster on all land in grass, especially do not neglect to use plaster on clover, whether this grass be on clay or sandy land.

TOBACCO.

Attend strictly to the tobacco beds and see that the grass is picked out as fast as it appears, and if the "fly" is troublesome, use fine manure well pulverized and mixed with scot, sulphur and fine dry sand, as a top dressing. The sweepings of the tobacco house floor, with plaster and a little sulphur, is good, but we still adhere to our advice given a year ago, to buy "tobacco dust" from the snuff manufactories—it is cheap—and sprinkle

pretty thickly your plant beds once a week. We think it will keep off the fly and we know it to be a good fertilizer. It is a powerful stimulant and should not be used too strongly or it may burn the plants. This month usually furnishes good spells for stripping tobacco, that should be availed of as they come, for we learn it has been a bad winter for this work, as there have been but few good "stripping seasons."

STOCK OF ALL KINDS.

Look well to your working horses, as they require good food, good grooming and good quarters now, when they are shedding their coats and hard work is beginning.

MILCH COWS.

These require liberal feeding and attention at this season, especially those that are fresh, and have young calves.

Farrowing sows require much care, and comfortable, dry pens, each one in a pen to herself, at least for two weeks before she is expected to farrow.

Sheep should, if possible, be separated, and the ewes with young lambs and those soon to have lambs should be put to themselves, if possible on rye field or good grass, and put up at night in a pen where they can go under a shelter, which has a dry floor, covered with leaves, pine shutters or short straw affording clean bedding. Give them at least once a day turnips, and once a day oats and chopped corn—plenty of fresh clean water with what salt they may want.

PLOWING

Do all the plowing that can be done this month, and see that the plow-men do good work, that is, cut even furrows, well turned and leave no strips between the bottom of the furrows unturned, which is a very common fault, that is not observable to the casual looker on, because being at the bottom is covered by the next furrow. Follow the plow and see if the share cuts clear through to the furrow just turned. If it does not, set the plow so as not to cut so much width. Let the furrows be of even depth, not 6 inches in soft ground, and in hard places 3 inches. Plow deep if the soil is deep, but plow never less than 6 inches deep, even if a poor soil is brought up. Let each plowing of turf land be deeper than when last the turf was broken, until you have 10 or 12 inches of mellow soil, full of humus or decaying vegetable matter. If the subsoil be a hard pan, we advise, by all means, to break it, at least, 3 or 4 inches in each furrow, with the subsoil plow following after the turning plow. As soon as the plowing is done or as it daily progresses, harrow with the Thomas Smoothing Harrow or with the new Carpenter Harrow when set

as a smoothing harrow—this harrow was illustrated in the MARYLAND FARMER last month—and afterward keep the land stirred and loose, and all weeds and grass destroyed, until it is in prime order to receive whatever crops may be put in it. Let it be a rule, *never plow or harrow land when too wet, if you are, by a wet season, forced to wait a month.* If the land is too moist or holds water, *drain it* by open ditches or under-drains, it will repay any reasonable outlay of money for this purpose.

ROOT CROPS.

We advise planting potatoes as early as possible. Select a piece of ground for beets, Mangels, Ruta Bagas and other roots. Plow very deep and harrow, then manure it heavily with well rotted stable manure and harrow it in. Leave it until next month when we will give you our opinion how you shall proceed in sowing and cultivating these indispensable crops.

CORN.

If the weather is good and your ground in fine order, plant corn as soon as you can. Be sure and get the best seed corn if your own does not entirely suit you. But do not plant all your crop of a kind which you have no personal knowledge of, however highly it may be recommended. It is well to try a small quantity of new varieties, and give them a fair test with the best that you or your neighbors have. There is no crop which improves more than corn by careful selection of seed and occasionally crossing it with other corn from a distance, or acclimatizing Northern corn, which sown in our climate, becomes a different article entirely from what it is in its native home, and adds early maturity to our usually late varieties. We have found all grain from the North of us, did better the second year, than grain from the South of us. We succeeded admirably one year by getting some seed corn from Kentucky and from Indiana. Where it was planted on very rich soil it far exceeded in yield our own sort, but where the land was thin our corn beat it.—corn from the North, seems to act just the reverse. It will exceed in yield our corn on poor soil, and on rich soil in our climate, the Dutton, for instance, will grow 5 feet high the first year, and the next it will almost rival our tall growing varieties, yielding more fodder. Such we have in years past found to be the effects of climate and soil upon this grain. Corn is yet destined to be made far more prolific and valuable; its culture and improvement has been too long shamefully neglected, but intelligence and well directed experiments have already done much and give assurance that it will be ere long greatly increased in its real merits and made the most

wonderfully productive of any cereal that ever grew. It would be well if our farmers were to get a small quantity of Dr. Sturtevant's improved corn and try it in this section—Dr. Sturtevant, of Boston *Scientific Farmer*, who has been for years making the culture of corn a special study. We saw ourselves last summer some astonishing crops on his farm at South Framingham, Mass. His first essay was to reduce the size of the cob, and he showed us ears 14 inches and more long, with 8 rows, and a cob like a pipe stem or so small, an ordinary finger ring would go over it. We have more to say about corn in our next number. We have perhaps peculiar notions, but we shall set them forth for what they are worth, and trust some of our friends will, at least, value them enough to try our views by honest practical tests. Nothing like trials of theories and the statements of experiments we see published, by the fair test of experiment. It requires but little time and attention to test the *facts* as set forth by other people, and if *true* so state it, if not so in your case, so state it, that our fellow farmers may have the benefit of results, fairly obtained by unprejudiced seekers of information.

The meanest of all insignificant meannesses is finding out by the *suggestion of another*, a new and better mode of cultivating a crop and withholding the secret, if *secret* it be, from the public. *Plagiarism* is a despicable, nasty *crime*, as *Orange Judd* said once, when a Premium Essay was imposed on him as an *original*, and found to be a copy of another, and it is equally mean, if a man has discovered a fine fruit by hybridizing at the suggestion of another, to publish it as *his* discovery without credit to the original suggester of it.

LUCERN GRASS.

If persons are disposed to go into the soiling system, which we think is after all in the present state of labor in our section of country, is the better plan, doing away with so many, and so very costly fences, we would advise our friends to sow, this month, *Lucern*, it having given great satisfaction to those who have tried it in every State south of Mason and Dixon's Line, and who have sedulously kept it the first year from being overrun and smothered by other grasses and weeds. It is a grass which seems peculiarly affected, or rather we would say opposed to having any near neighbors, it is reluctant to have any other grass, in its territory and refuses to grow, or pines and dies unless it be the ruling sovereign on the soil devoted to it, therefore, it must be sown on rich, deep soil, in this month, lightly brushed or rolled in; better to be drilled in narrow drills, and the spaces kept clean of all other grasses and weeds until it gets

full possession of the whole ground. Give it good culture until it spreads, keep off all other grass and every weed, and the second year, you will be wonder-struck by the enormous yield of forage it will give per acre. Cutting three or four times and no diminution that is perceptible at each cutting (of the amount yielded). It is a sweet and pleasant grass to all stock. Few persons in this country understand its real value. We would urge some of our friends, especially those who "soil" their stock (a system we much admire) to try an acre as a beginning. We are enthusiastic in this matter, having seen the wonderful crops of Mr. P. on a small lot in Baltimore City. He has promised us heretofore, and we still hope to give our readers his practical views about this Alfalfa or Lucern. Wherever it has been tried, it has been perfectly successful if the conditions about its culture and habits have been faithfully observed. Good soil, well manured, deeply plowed, nicely prepared, drilled, well cultivated so far as to keep off weeds and other grasses for one year, or until the Alfalfa or Lucern gets full possession, after that nothing done to it but an occasional manuring with well rotted stable manure, Kainits, ashes, plaster and salt once a year and regular mowing, three and may be four times a year, yielding 1 to 2 tons per acre of hay, but 4 to 6 tons fed green, which it is especially intended for, although it makes good hay. What more can a farmer want, who keeps his cattle in stable or a small lot the year round? Four tons of green food better than clover three times a year from *one acre*! About this there can be no exaggeration, if the recipe for cultivating this crop be observed and followed in all its simple details.

Use of Lime.

Prof. Caldwell reasons in this way in the *New York Tribune*:

"Hence the first and one of the most important rules to be observed in the use of lime is that it should be applied in those large doses only to soils comparatively rich in humus, or strong clay soils rich in finely divided silicate. It has been proved by experiment that lime will convert plant food from the insoluble to the soluble forms in either case. We find the proverb current in France and Germany, as well as in our own language, that 'Lime without manure makes the father rich but the children poor,' which means plainly enough that not only should we start with good soil in using lime, but should maintain its good condition by the liberal use of manure; and we find that whenever, in this country or elsewhere, lime is used intelligently, manure is used freely."

Pearl Millet.

Messrs. Editors of Maryland Farmer:

We herewith send you a copy of an article by the senior member of our firm on Pearl Millet. In view of the fact that its culture is now getting to be a matter of national importance for fodder crops. We think its republication in your columns would be of value to those of your readers who may not be aware of its importance. The season of its planting is from March to June in the various sections of the Union.

Yours truly,

PETER HENDERSON & Co.

"Pearl Millet has been cultivated for some years as a forage plant in some of the Southern States, as 'African Cane,' 'Egyptian Millet,' Japan Millet,' and in some places as 'Horse Millet,' but little was known of it at the North before last year, and then only in such small quantities as to hardly allow of a fair trial. From what we saw of it in 1877, we determined to give it a thorough trial this season. A piece of good strong loamy ground was prepared as if for a beet or turnip crop, by manuring with stable-manure, at the rate of 10 tons to the acre, plowing 10 inches deep, and thoroughly harrowing. The Millet was then sown in drills 18 inches apart, at the rate of 8 quarts to the acre. We sowed on the 15th of May, about the date we plant corn; in 12 days the plants were up so that a cultivator could be run between the rows, after which no further culture was necessary, for the growth became so rapid and luxuriant as to crowd down every weed that attempted to get a foothold. The first cutting was made July 1st—45 days after sowing; it was then 7 feet high, covering the whole ground, and the crop, cut 3 inches above the ground, weighed, *green*, at the rate of 30 tons per acre; this, when *dried*, gave 6½ tons per acre as hay. After cutting, a second growth started, and was cut August 15th—45 days from time of the first cutting. Its height was 9 feet; it weighed this time at the rate of 55 tons to the acre, *green*, and 8 tons dried. The *third* crop started as rapidly as the second, but the cool September nights lessened its tropical luxuriance, so that this crop, which was cut on October 1st, only weighed 10 tons green, and 1½ tons dried. The growth was simply enormous, thus: 1st crop in 45 days, gave 30 tons green, or 6½ tons dry; 2d crop in 45, gave 55 tons green, or 8 tons dry; 3d crop in 45 days gave 10 tons green, or 1½ tons dry. The aggregate being 95 tons of green fodder in 135 days from date of sowing, and 16 tons when dried to hay. This exceeds the clover meadows of Midlothian, which, when irrigated by the sewerage from the City of Edinburgh, and cut every four

weeks, gave an aggregate of 75 tons of green clover per acre. There is little doubt that Pearl Millet is equally as nutritious as corn-fodder, which it resembles even more than it does any of the other Millets. We found that all our horses and cattle ate it greedily whether green or dry. If sowing in drills is not practicable, it may be sown broadcast, using double the quantity of seed—say 16 quarts per acre. The ground should be smoothed by the harrow, and again lightly harrowed after sowing; if rolled after harrowing, all the better. I know of no farm crop that will better repay high manuring, but so great is its luxuriance, that it will produce a better crop without manure than any other plant I know of. In those parts of the Southern States where hay cannot be raised, this is a substitute of the easiest culture, and being of tropical origin, it will luxuriate in their long hot summers. Even though our Northern seasons may be too short to mature the seeds, our experiments in New Jersey this summer show what abundant crops may be expected if the similar conditions are secured. Pearl Millet as a fodder-plant presents a new feature in our agriculture, and I feel sure that within ten years we shall wonder how we ever got on without it. (Besides our own testimony given above, we have received the most satisfactory letters from experienced men in different parts of the country to whom we sent seed of Pearl Millet for trial, and all are unanimous as to its enormous productiveness and great value. From all we have seen and can learn, we are fully convinced that Pearl Millet is to be one of the great fodder plants of the future.)

The *Rural New Yorker* gives the following experiments in different localities:

Last spring Mr. Joshua Knight, of Ogle county Illinois, sowed thirteen barrels of salt on twenty acres seeded to wheat, and left a strip in the middle of the piece without salt. The ground on which he sowed the salt produced over eighteen bushels of good spring wheat per acre, while that on which there was no salt was hardly worth cutting—the wheat being badly shrunk, injured by rust, chinch-bugs, etc.

A similar experiment was tried in Iowa last spring and the result was published in the *Iowa City Republican* as follows:

"H. G. Coe, of Cedar county, tried the experiment of spreading three bushels of salt broadcast over two acres of wheat-field. The yield was forty bushels per acre, while the rest of the field gave only nine and a half bushels per acre. The straw was bright, not being injured by rust, as the wheat along side of it was, and it stood 6 inches higher,"

The Office of the Agricultural Press.

Editors Maryland Farmer:

In this day of progress and inquiry in every branch of human effort, it is natural to ask—when we consider the vast importance, socially and commercially and the interests involved—how can the agricultural press best subserve the object of its creation: how can it be most useful to its patrons?

The farmer finds in his daily or weekly newspaper a great variety of exciting and sensational matter: murder, outrage, robberies and defalcations unto sickness; he perplexes his head—unaccustomed to dealing closely with public matter—with the intricate and diverse theories of finance, tariff, law and government; with reports and counter reports of majority and minority members; with partisan strife and allegation and counter-allegations of fraud and bribery, personal altercations and the other ingredients which make up the modern newspaper, until he retires from the effort to get at or determine the truth like one lost in the mazes of a jungle: *government* is not his vocation: and the more the farmer perplexes himself with the stimulating properties of the mixed newspaper, the more disposed he is to turn, and the more he is attached to, his agricultural paper. Here is familiar ground to him; here he is at home: he reads the various accounts of his brother farmers about horses and sheep, and cows and hogs, and the implements and processes of his vocation, compares the statements with his own experience, accepts, rejects, criticises and lays up in his mind new ideas to experiment with, or to govern his future proceedings with sole reference to his conduct as a tiller of the soil and its closely related branches, such as stock-raising and the manufacture of the tools, implements and machinery of his trade: how disappointed then, when he finds pages—in what he expects to find these matters discussed—given over to private affairs and personal allusions and disputes in which he takes no interest whatever, and by which he is not benefitted either, agriculturally, horticulturally, commercially or morally: how disappointed to find the spirit of strife of the commercial press carried into the discussion of agricultural questions, which should always be treated with the utmost calmness, fairness, patience and courtesy on account of the diverse opinions held on, even important questions and the many sides to be viewed in most questions that come up for consideration in the agricultural press. In the great change which is rapidly coming over the land in the mental calibre of farmers, in the mighty Grange movement and its intellectual accessories, we see evidences of the self-eleva-

tion of the farmer ; he is taking higher ground in every respect and speedily making himself heard in the public council, exercising not only his vote, but his long neglected voice in the management of our public affairs: how important that no bad example of personal stricture should encumber the pages of his agricultural paper to divert his attention, even for a moment from the weighty matters appropriate to those pages.

As a sample of the high ground now being taken by the farmers in some sections, I quote an item going the rounds:—

"The Des Moines, (Iowa), *Register* says the farmers "rule Iowa. They rule it well."

Here is only one instance of the power and influence the farmer is extending under the new awakening, due almost exclusively to the broader conceptions of his duty and his real power taught him by the intellectual agencies—the agricultural press and the rostrum—which have been brought to bear upon him within the last few years, and these agencies will be best exerted in behalf of the farmer by pruning from them the dross of strife and criticism, which enter so largely and so unprofitably into the construction of the ordinary news and political paper.

VERUM.

Salt on Wheat.

"In an interesting series of experiments recently made on the farm of the Royal Agricultural Society of England, the manure value of salt was unmistakably indicated. An acre of wheat dressed with 300 pounds of common salt yielded thirty-nine bushels of grain, with a proportionate amount of straw ; while an adjoining acre, left unmanured produced only twenty-nine bushels per acre, with the straw imperfectly developed. The entire cost of the crop is not stated, but this experiment shows that the additional ten bushels resulting from the salt were produced at a cost of 30 cents each. In another case a piece of ground intended for wheat was plowed the preceding fall, and again in May, when it was sowed with salt, and afterwards plowed before seeding. On the 1st and 2d of September wheat was sown at the rate of two bushels to the acre. The crop when harvested, yielded, according to the estimate of the owner, Mr. John Park, not less than forty bushels of grain to the acre, with a luxuriant growth of straw. From these and many similar cases the inference seems to be that salt is a specific for the wheat crop, imparting solidity to the grain and firmness to the straw. But it must not be concluded that equally good results will always follow the application of salt."

Montreal Gazette.

Kent County Agricultural Association.

At its meeting on 3rd of March, 1879, after the transaction of routine business and other matters disposed of, the regular question selected for discussion came up.

"What shall be done with our surplus straw—spread it directly on the land, or first pass it through the barn-yard?" was opened by Mr. Isaac Parsons, who said that one load of straw would cover as much land as two loads of rotted manure, but whether it would do as much good he had not ascertained by experiment, but thought it would not.

Mr. R. Nicholson had never experimented in spreading straw, but stated that he had noticed its effect on lands in his neighborhood, and that three applications were about equal to one of manure. Had seen good effects from burning straw on the land.

Mr. J. W. Corey thought the proper place for surplus straw was on the land,—the sooner the better. Had seen good results from burning straw on the land for the first crop, but none afterwards. Had had better results from plowing it under after the first crop. Thought it improved the land. Thought that one application of manure was worth four of straw.

Mr. Wm. W. Stephens said it was a question with him whether it would pay better to spread good straw or haul it in the yard to be rotted. Thought injured straw ought not to be hauled into the barn-yard.

Mr. John Carter thought that spreading straw did a great deal of good. It protected the land farm hard frosts and hot suns.

Mr. W. H. Stewart had seen good results from spreading straw about three feet deep ; and burning it just before plowing for wheat, equal to barn-yard manure.

"The following resolution was then offered and adopted :

Resolved, That in the opinion of this Society it is better to spread surplus straw on the land than allow it to rot in or out of the barn-yarn.— D. in *The Transcript*, Chestertown Md.

We know of a wealthy farmer, but a short distance from our farm, that, up to a few years ago, failed to get good crops, though manure was literally piled upon the land regardless of expense. Lime was suggested and used in large quantities, and the best crops ever known on that farm have been raised since. "The more dung the more lime," and the converse is equally true.—*Rural New Yorker*.

Live Stock Register.

For the Maryland Farmer.

WHAT KIND IS THE MOST PROFITABLE, CONSEQUENTLY, BEST KIND OF CATTLE FOR THE FARMER?

To the housekeeper the milch cow, if a good one, is a great blessing—if inferior, a costly incumbrance. According to my plan of selection of a good milker—a cow may be selected too *rich* for *general* purposes—not for butter making) for when too rich, the whole body rises in cream, too thick for table use and leaves the milk blue and and too poor for any use—another cow would have to be kept for milk for the table. There has been quite a favor for Alderneys as rich milkers, they are too small to be very deep—in them I have no experience, my *theory* is, while probably there may be many rich milkers among them, all are not so, as in the case with all breeds of *any* nature that give milk—but I write in the farmer's view. Can the Alderneys be suitable for farming purposes? I consider them too small—if from sex, age or deficiency they fail as milkers, of what profit can they be to farmers? Too small for oxen or for beeves; if they would readily take on fat, their carcass would not pay for the feed to make it, but a farmer ought for profit, to aim at more than one good quality in animals. Years since, a patriotic son of Virginia brought to her the Kaisi cattle—they were long-legged, slab-sided, light bodied, could jump over farming fences and had every quality of form that judicious farmers had been trying to get rid of, fortunately they were not fancied. The beef cattle have many good milkers among them; I have only had experience with two kinds, Short-horns and Devons—I have had high bred Short-horns that gave 9½ gallons of milk per day and 20½ pounds of butter per week, I have churned their cream into butter with a teaspoon in 15 seconds, but the cream was very thick and the milk poor blue—both unfit for the table. I have known Devons almost as rich, but both are rare, because the quality runs in families, and importers have devoted themselves to the beef quality almost exclusively—the consequence was the milking quality so far neglected as to bring cows of that family to enormous prices both in England and America.

The Devons though small in their purity when made steers young, acquire great size. I was much pleased to see the good accounts given in the meeting of the Montgomery county farmers of the fine milking properties of their cows. Excuse this long, I fear, uninteresting piece, cut as short as you please.

J. W. WARE.

[Not too short, if much longer it would be all the better Col. What you write, everybody reads with pleasure and finds instruction. [Eds. MD. FAR.]

Sheep Husbandry.

In those sections of country in which stone walls afford a part of the fencing, there are at the present time two principal causes that operate against successful sheep husbandry. These are dogs and stone walls; where ever sheep husbandry is kept up, notwithstanding the presence of dogs, little trouble need be anticipated, for in such districts the dogs are perfectly acquainted with the sheep and the sheep with the dogs, so that no trouble comes from their being frightened or destroyed by them; but in those sections where the raising of sheep has been abandoned for a few years, and a multitude of worthless curs have accumulated, any efforts to engage in sheep husbandry will almost always result in failure and total loss, because when a dog enters an enclosure of sheep, which are unacquainted with that kind of animals, the impulse is to run and then the dog is sure to follow, and the result will be a deadly chase in which several sheep will be killed and the remainder almost ruined from fright. And notwithstanding the provisions of law that the owner of the dog shall be liable, it is often a difficult matter to prove the act as it frequently occurs in the night season, and so "poor Tray" and his master both go free even if he were able to respond; then again it is frequently the case that the owner of the dog is entirely unable to pay anything in remuneration even if the trouble is brought home to the guilty dog.

The law also provides for remuneration from the town treasury, where loss of sheep can be directly traceable to destruction by dogs, but that does not seem to be satisfactory, or it certainly has no healthy effect to encourage sheep culture in Connecticut.

The destruction of sheep by dogs has been very disastrous in some portions of this state; H. L. Stewart, of Middle Haddam has been an extensive breeder of sheep, and had made additions to his flock by importations of animals from the best flocks of England at a cost of hundreds of dollars, and was in a fair way of very greatly improving not only his own but neighboring flocks, but in an evil hour, (in the night season) his flock was beset by dogs and a large part of his flock destroyed, and others so injured as to necessitate killing them; this so discouraged him that he went out of sheep husbandry entirely and has never since engaged in it. This is only one of many cases, and according to present appearances, unless something is done, the above cause, with another which is considered a serious one, and will be explained, will result in the extinction of sheep husbandry from the good old "nutmeg State." The other cause is

old walls and poor fences. This is looked upon as a great obstacle by many, and is in fact, considered by some to be a chief cause of the decline of sheep husbandry in the above mentioned state.

Notwithstanding the average prosperity of the New England farmer, and his comparative success as a tiller of the soil, he is by no means perfect, and undoubtedly "does many things which he ought not to do," and "leaves undone many things which he ought to do;" among these is the proper care of fences. Because in many cases he cannot see any particular remuneration from repairing fences and walls, they are and have been left in poor condition. Now, the sheep is an animal that has a natural roving disposition which it is sure to gratify unless restrained, and this will not be accomplished without proper fences, and when the sheep once finds that it has no means of escape, it will remain contentedly; but let it once find a means of leaving the enclosure, and that perhaps more desirable feed is found without, and it will be continually restless and sure to be making attempts to effect an escape from its bondage; there is, therefore, a necessity that every farmer who engages or is expecting to engage in sheep husbandry, should first see to it that his fences are in such condition that he is sure his animals will be retained within them, for nothing will start the ire of neighbors sooner than trespassing animals.

Columbia, Con.

WM. H. YEOMANS.

For the Maryland Farmer.

Breeding vs. Feeding.

BY D. Z. EVANS, JR.

While we owe so much to careful breeding for the vast improvement we have now in our splendid breeds of domestic animals, we owe still more to systematic feeding. This may be new arguments to very many of our readers, but we intended to fully explain ourselves on that point, for there seems to be but few who are willing to make such assertions as we have, much less to endeavor to substantiate them. We have several times been taken to task for our, to some, peculiar ideas, but experience convinces us more every day that we are not judging from false premises.

In commencing the improvement of our ordinary farm animals, to make a homely illustration which will be appreciated by farmers and others, the very first thing which is done is to give a better quality of food and in increased quantities, exercising a due care for the comfort and well being of the animals in reference to the barns and stabling. That is the initial step, the next one being the selection, for breeders, of such animals as have thrived the best under the increased food, which

have showed the greatest tendency to improve. These are used as the sires and dams of the future generation, which in due time, makes its appearance, and the young animals invariably show these qualities in an increased form, and it is natural that the desirable qualities should show themselves in an intensified form, for the parents showed, by their rapid development that the germ of improvement was there, only requiring a fostering care to produce desirable results. By continuing in this way for a number of years, make the matter of selection only secondary, in importance, to high and judicious feeding, and by breeding them to some well conceived and fixed type, improvement is continually fostered and guaranteed, and soon a breed is formed which can be relied upon to reproduce, with a great deal of certainty, the high and desirable features and qualities claimed for the breed. It is a work of considerable time, taking a vast fund of patience, perseverance and no small amount of knowledge, and must only be undertaken with a full knowledge of what has to be overcome. This is the price which must be paid by him who aspires to create a new breed. In gradually improving one's herds and flocks without the idea of forming a new breed being considered, there is less difficulty experienced, and all farmers who wish to increase their revenues should try it.

All our breeds of fine stock, horses, cattle, sheep swine or poultry have been produced by making the subject of feed a careful study, and by making it of paramount importance, breeding merely perpetuating the good effects produced by judicious feeding. Let those who have been so thoroughly imbued with the idea that breeding is first and feeding of but ordinary importance, procure a pair of choice, high bred pigs for instance, and put them in a pen adjoining one in which are a pair of fair common stock; give both pair only the same quantity and quality of food which has been doled out meagrely to the common stock, as a rule, before the choice pigs were bought, and, our word for it, you will think that about three fourths of the improvement in our breeds of domestic animals is due to the *feed*, and the other fourth to careful selection and breeding.

COOKED OR UNCOOKED FOOD.—Professor Farrington, in a summary of the experiments begun in 1870 by the Maine Agricultural College to ascertain which has the greater value as a food for swine, cooked or uncooked meal, says: "We have by an experiment which has been continued through from three to four months of each of the nine years since its beginning, obtained evidence that all the labor and money expended in cooking meal for swine is more than thrown away."—*New York World*.

For the Maryland Farmer.

Hereford Cattle and Other Matters.

Messrs. Editors:—I shall devote this letter to the account of my last two days in Herefordshire, and hope your readers will not conclude that they have too much of same sort. I was much interested in visiting the new, and well arranged stock markets at Hereford, but time did not permit my seeing much of the business done in them, as my friend, Mr. Duckham, had arranged that we should see some herds, in the vicinity of Hereford. We first went to the newly established place, belonging to P. Platt, Esq., some three and a half miles west of the ancient city, and on the banks of the Wye. There we saw the grand stock bull "Horace," (3377.) now nearly twelve years old, yet looking as fresh and active as a two year old. He has never been exhibited, but the numerous prizes won by his progeny at the Hereford meeting of Bath and West, of England, in 1876, so impressed Mr. Platt with his value as a stock getter, that he induced Kit, then owner, to part with him for 500 guineas (2500 dollars). The success which has attended Mr. Platt's exhibits, during the last autumn, has proved the correctness of his selection. Horace is a long, straight animal, on short legs, deep in his ribs, and a great deal of remarkably wealthy flesh, covered with a mellow and a thick curly coat of soft glossy hair—qualities which he appears to impart to all his descendants. I may here remark that Hereford breeders anxiously court such a coat of hair, whilst on our side we admire the sleek smooth coat. Mr. Platt selected his cows from the well known herds of Messrs. Tudge, Adjerton, Roger's the Rodd, Evan's Old Court, Taylor's Showle Court, and Mrs. Edwards Wintercott. His ox winner of the £100 champion prize at Birmingham was by Horace, and bred by Mr. Price Pembridge. The pair was his first year of entering for show yard honors, animals of his own breeding, and three first at Abergavenny, two first and a second at Drominster, a second at Tredegar, and the same at Bromsgrom, represented the prizes awarded to him.

Mr. Platt has also established a first-class flock of Shropshire sheep, with which he has been similarly successful; but time did not permit my viewing them, and we passed on to view the herd of his neighbor, Mr. E. Lewis, whose residence, "Wye Cliffe," is situated on the banks of that silvery and picturesque stream. Mr. Lewis does not go in very much for exhibiting, but stocks his land heavily, and looks more to the return obtainable from his steers, than by rearing bulls, although he

has two or three choice youngsters set aside for that purpose. I much admired his grand eleven year old cow, "Little Beauty," the name is a misnamer, as she is the largest-framed cow I saw in my travels—her grand, well sprung, yet deep ribs, deep chest and flank, broad loin, and her whole frame well covered with heavy flesh of excellent quality, her beautiful countenance, and fine open spreading loins, with a graceful wane, impressed me with the idea that she was the very ideal of what a Hereford cow should be, and I soon learned that she won first at Herefordshire, and second at the Bath and West of England Society's show in 1878. Beside his choice herd of cattle, Mr. Lewis has another specialty which attracted my attention, viz: A fine lot of brown mated game fowls. My regret was, that time was so limited, as a more hospitable gentleman than Mr. Lewis, I never met.

My next visit was to see the herd of Mr. T. J. Carwardine, of Stocklonbury, Drominster. The walls of his dining room are adorned with fine oil paintings, by Gance, and others of different show yard celebrities; perhaps the most striking is that of "Helena," winner of four first Royal prizes, in as many years, together with three first at the Bath and West of England, and the same at the Herefordshire Agricultural Society, beside numerous local prizes and a champion cup—her recorded winnings amount to £230 (1,150 dollars,) and while all this was going on she enriched the herd, by adding first-class progeny, her son "Anxiety," is in use in the herd—his show yard career has almost been as successful as that of his dam, right first, and four second prizes already standing to his credit at a little over two years old. DeCote (3,060) must have been a grand animal judging from his picture, and what is more, he possessed the properties of imparting his grandeur to his offspring, as "Helena," and others bear ample testimony. His son, "Roding," (4,907,) is now in use at Stocklonbury. He was sold when young, and before his value was known as a stock getter. He has since been repurchased, and last autumn he made his only appearance in the show yard in that popular class in Herefordshire, viz: Bull, cow, and offspring, when the trio carried first honors, notwithstanding the great use which had been made of him, in the herd, during the year.

Cherry, another descendant of "DeCote," with her two offspring, were awarded second at the Royal, besides many local prizes. I shall be mistaken if more is not seen of her beautiful offspring, named "Plumb" and "Apple Blossom." Owing to the extraordinary regulations of the Royal Ag-

gricultural Society of England, they will be out of age for showing at their meeting with any prospect of success. The rule requires, that they should have been calved on or after the 1st day of July, and as they were calved early in the spring, they will be too old for the young class, and too young for the older. The absurdity of the regulation is strongly condemned by breeders, as it practically compels the adoption of the worst possible month in the year for the cow to calf. Mr. Carwardine has several choice young bulls coming on, and a large herd of grand cows. He is a young man, with wife and one child, and a servant. I strongly urged him to transfer his home and stock to either Virginia or our own State, where he could purchase a good home cheap, and while unmistakably advancing his own interest, would be a great acquisition to either State.

Mr. Carwardine kindly drove us over to "Hamp-ton Court," the seat of J. H. Arkwright, Esq., the first President of Hereford Herd Book Society. This seat is a fine old castellated, baronial mansion, formerly the seat of Earl of Cowingsley, and was purchased in 1809 by Sir Richard Arkwright, whose mechanical genius laid the foundation of England's greatness in her cotton manufactories. Some forty years ago the mansion was renovated and enlarged with great taste, by the father of the present highly respected owner. I could have dwelt long in admiration of the fine old edifice, the beautifully wooded park and its surroundings, but time would not permit any further diversion from the object of our visit, which was to see the herd whence my grand old bull, "Sir Richard 2d," (4.984), and my cow, "Giantess," had been selected. Mr. Arkwright has recently added to his herd the celebrated prize winning cow, "Rosebud," bred by Mr. Rogers, the Grove, by Sir Thomas, 9. sire "Sir Benjamin," thus claiming the same grand sire as "Giantess." "Rosebud" is a winner of two first Royal, and first Bath and West of England, and numerous other local prizes, together with the champion prize at the Worcestershire show as the best female exhibited. She is now ten years old, in calf to "Ivinglin Boy" (4662), and carries a great amount of wealthy flesh, possessing a sweet countenance, and full, yet placid eye. Her horns are rather too contracted, or otherwise she is as nearly faultless as possible. "Beatrice" another addition to the herd, bred by that veteran breeder, Judge, of Adjerton,—she too claims first Royal honors, beside several other first prizes, and is the dam of the grand bull, " Marshal Neil" (4760.) of which more anon. I had not time to particularize the numerous fine cows which with those mention-

ed, adorn the beautiful park; but on entering the buildings, I was first shown "Gaylass 4th." She is a beautiful yearling heifer, winner of the 1st prize at the Royal, the Bath and West of England and Hereford Societies. Struck by the name, as that of the dam of my "Giantess," I naturally felt some anxiety to know more about her, when, to my great satisfaction, I found that her dam is a half sister of "Giantess." Her companion heifer "Abigal" was third when "Gaylass" was first; they are both of fine quality and nice character. The best of the young stock is the yearling bull, "Conjuror,"—winner of first prize at each of his exhibits, fairly distancing all competitors at the Royal, the Bath and West of England, the Herefordshire, Shropshire, and Tredegar shows. His great scale, fine character, excellent quality flesh, soft glossy hair—all bespeak first-class blood.

"Marshal Neil," was next marched out; he was purchased at the Adjerton sale, although a decided show yard animal, has never been exhibited, his breeder, Mr. Judge, having sold him to go to Australia, but the prohibition passed by the Colonial Government prevented his going—from such a magnificent cow as "Rosebud," it may readily be imagined that he is far from mediocrity; he is certainly one of the handsomest animals I ever saw, and calculated to greatly benefit the herd in which he is placed.

Mr. Arkwright has a large estate divided among a number of tenants, and most praiseworthy keeps one bull for the improvement of their herds.

Time, tide and railway trains wait for no one, hence we had to hurry to Drominster for our train. While awaiting there, Mr. Carwardine kindly introduced me to some of his neighbors, one of whom was quite enthusiastic over our live stock, stating with years of experience with stock, he had *that day* seen in Drominster, eleven cattle brought from America, as fine as ever came under his observation. Our train coming, we took it for Ross, reaching "Bangshan Court," with a whetted appetite, which our good hostess had amply provided to satisfy. On Saturday morning, 7th December, I bade adieu to my kind friends, Mr. and Mrs. Duckham, carrying with me a most grateful recollection of their hospitality.

I fear this letter will appear to some of your readers as too much of Herefords and Herefordshire. I however came to see the stock and country, and give you the benefit of my trip.

Very truly yours,

JOHN MERRYMAN.

Florence, Italy, March 4th, 1879.

History of the Maryland Agricultural and Mechanical Society.

CHAPTER IX;

In the last chapter an important typographical error occurs in the date of the meeting therein spoken of, it was in 1851, not 1857 as printed.

At a quarterly meeting of the Society held on the 4th of February 1852, on motion of Mr. E. Reynolds, it was resolved that a committee be appointed to visit Washington and urge upon Senators and Representatives the importance of establishing an Agricultural Bureau.

Mr. Walsh, of Harford, the following additional resolutions:

Resolved, That to do justice to the great interests discussed in the Agricultural Reports annually printed by Congress, a Bureau of Agriculture is indispensable. Said Bureau should have no connection with the Census Office, Patent Office, or any other, to divide the time, the thoughts and efforts of its head, to the neglect of agriculture.

Resolved, That the Farming interest has been too long neglected, and that the policy first distinctly developed by President Washington, in his last annual message to Congress, ought to be adopted without longer delay.

Mr. Calvert, President, moved as an amendment, that instead of a bureau, under the management of any one of the present departments of the government, as proposed in the resolutions, that it be recommended to Congress to make provision for a distinct branch of the government, to be styled the "Department of Agriculture," similar to that of France and other nations, and that a Cabinet Minister be placed at the head of the same—and that the subject be recommended to the earnest consideration of the Agricultural Societies of the United States, for their co-operation.

The resolutions, as amended, were then adopted.

Resolutions from the Pa., State Agricultural Society, for the establishment of a National Society at Washington, were read, and on motion of Wm. C. Wilson, esq. were concurred in, and the President was authorized to appoint a delegation from this state to attend the meeting of the same—to consist of the President as chairman, and one member from each Congressional District.

The President was authorized to appoint a committee (of which he was requested to act as Chairman), consisting of one from each Congressional District, to proceed to Washington, to promote the object set forth in the resolutions relative to the establishment of an Agricultural Department, and to consult with the Senators and Representatives in Congress from this State—Committee, Ch. B. Calvert, Ch'n., Ed. Reynolds, of Baltimore city, G. W. Dobbin, Howard Co., H. G. S. Key, St. Mary's Co., J. C. Walsh, Harford Co., Jno. M'Pherson, Frederick Co. and W. H. Jones, of Somerset Co.

This meeting adjourned to the 18th instant.

On the 18th a meeting was held, with J. T. Earle, Esq., Vice President from Queen Anne's

Co. in the Chair. Mr. R. McHenry moved that the resolution adopted at the last meeting appointing a committee to visit Washington and urge the establishment of an Agricultural Department be considered. This was strongly opposed by W. W. W. Bowie, Col. Carey and Mr. Sands, and after considerable discussion Col. Carey offered the following resolution (as a compromise) which was adopted:

Resolved, That all further proceedings under the motion made at the last meeting of this Society, for the appointment of a committee to visit Washington, to urge the establishment of an Agricultural Department, be postponed until the next annual meeting of the Society.

At this Meeting among other proceedings Col. Walsh, of Harford, called the attention of the Society to the importance of a change in the present mode of awarding the premiums for certain objects, which he specified, and to correct which he offered the following preamble and resolutions:

Whereas, It being a matter of considerable importance to the agricultural community of our State, that all farming implements, especially those involving a considerable expense in their purchase, and which, if properly constructed, would be profitably and extensively used, should be properly tested, and their merits and demerits made known by a fair and impartial examination and trial, it is therefore

Resolved, That a committee of—members be appointed by the chair, whose duty it shall be, at some convenient period during the ensuing harvest, to examine any reaping or mowing machines that may be presented to their notice, and to report to this Society, at its annual meeting in October, an opinion of their respective merits, based upon their actual performance in the field. It shall be the duty of said committee to give notice in the public prints of the time and place selected for the trial. It is further resolved, that, to the exhibitor of the machine possessing the most valuable properties, as decided by the committee, a premium of \$—shall be awarded by the Society.

Resolved, That a committee of—members be appointed by the chair, who shall, at as early a day as practicable, invite the proprietors of the several hay or straw presses now in use, or any others which may be exhibited, to an actual test of their qualities in presence of said committee; and, to the exhibitor of the press decided by it as most deserving, a premium of \$—shall be awarded by the Society.

The resolutions were read, and unanimously adopted.

Col. Bowie then moved that a premium of \$50 be offered for the best Tobacco Press, and that a committee be likewise appointed to make a practical test of the capacity of the machines which may be offered to their inspection, at such time as the committee may select—which motion was adopted.

Dr. Wm. H. DeCourcy made some remarks and proposed that a committee of two gentlemen from

each of the several counties of the state, be appointed by the chair, whose duty it shall be to examine and report their estimate of the gathered and growing crops, at the annual meeting of the Society.

The Resolution was adopted, and the chair appointed the following committee.

Committee under Dr. DeCourcy's resolutions: For St. Mary's County—Col. Sothoron Key, J. H. Sothoron. Charles County—Gen. John G. Chapman and Col. Wm. Coad. Prince George's—Col. W. W. Bowie and J. D. Bowling. Calvert County—George W. Weems and Daniel Kent. Anne Arundel County—Col. Geo. W. Hughes and N. B. Worthington. Howard County—George W. Dobbin and Gen. J. W. Tyson. Montgomery—A. Bowie Davis and E. J. Hall. Frederick—John Lee and Davis Richardson. Washington—David Brumbaugh and Andrew Rench. Allegany—Col. C. M. Thruston and Dr. Samuel P. Smith. Carroll—George Patterson and Col. Ege. Baltimore Co.—Col. Wilson M. Carey and Henry Carroll. Harford—Col. Ramsay McHenry and John H. Price. Cecil—Rev. James McIntyre and Major Thomas M. Forman. Kent—George Hollday and Wm. T. Smith. Queen Anne's—Dr. Wm. H. DeCourcy and Alexander W. Thompson. Talbot—M. T. Goldsborough and Jos. Prior. Caroline—Jesse Pearson and Thomas Stewart. Dorchester—Dr. Joseph E. Muse and Wm. T. Goldsborough. Somerset—Isaac D. Jones and W. H. Jones. Worcester—Gen. W. H. Handy and Wm. W. Purnell.

Mr. McHenry, offered the following resolutions which were adopted:

Resolved, That is the opinion of this Society, the establishment, by statute, of standard of measure or weight, for the sale of potatoes and apples, bulbous roots and fruits generally, would greatly promote the convenience and interest of producers and fair dealers in these articles of food.

Resolved therefore, That copies of these resolutions, signed by the president and secretary of this Society, be forwarded forthwith to the president of the Senate and speaker of the House of Delegates of Maryland, with respectful request that the same be presented to the bodies over which those officers respectfully preside.

The above extracts are taken from the Secretary's report of the proceedings as published in the *American Farmer* vol. vii. In the same Journal will be found a strong and manly letter of President Calvert, severely criticising the action of this adjourned meeting in any manner rescinding the acts of a preceeding meeting. This much is given to show how zealous members of the old Agricultural Society were, and with what important questions they grappled, and how diligently they applied themselves to further agricultural improvement by offering large premiums for labor-saving machines, that could stand the test of trial with others, when in actual operation under like circumstances, before impartial judges.

[TO BE CONTINUED.]

The Four Great Arches of Vegetable Life.

Editors Maryland Farmer:

The four great *arches* upon which all organic or vegetable life is supported are carbon, represented by charcoal; hydrogen and oxygen, represented by water; and lastly, nitrogen, taking its place in company (not *combined*) with oxygen, and composing 78 per cent. of the air we breathe.

From these four great elements, crops out all organic life, assisted by the gentle rays from above and the sweet purifying mineral matter below. With these views forced upon the writer by repeated experiments, I have for the past ten years urged upon the farmers as well as manufacturers of fertilizers to drop the use of such offensive matter, as rotten fish, blood, tankage from the slaughter houses of the West and from every other source of decaying animal matter, only for the purpose of obtaining 2 or 3 per cent. of ammonia, and thereby adding 20 to 50 per cent. to the cost of the product.

The theory of Prof. S. W. Johnson, borrowed from Stockhard and others, of placing ammonia as the standard of value, from which point all others are graded, I think is based upon false premises, and has cost our farmers millions of dollars for an article which nature has provided in abundance as it has the other movable bodies, carbon, hydrogen and oxygen referred to above. The importance of nitrogen in the growth of all highly organized plants, such as wheat, corn, rye &c., cannot be questioned, for without it we could not have the blood of the grain, represented by the gluten, but what I have contended for is that it is not necessary to apply such offensive material as is used; on the contrary no organic matter is plant food, something of a pure nature is sought for, and that is found in the pure distilled rain drops, pure circulating, refreshing air, loaded with such desirable companions as carbonic acid and moisture, to meet in the great work, the inodorous and foul destroying mineral matter of the earth, which must have the immovable elements, such as phosphoric acid, potash, magnesia, lime, silica, &c., in proper proportion and condition to act in harmony with the movable ones. When these conditions are met with, plants must grow; the earth will bring forth its fruit and animal life; from the lowest to the highest will be provided for. To accomplish this great end, should be the ambition of all seekers of the truth, and if I am right in my conclusions, millions of dollars can be saved to the farmers by discarding all foul animalized fertilizer, and fall back upon the inorganic kingdom and apply just such as is needed, which must be ascertained by experiments, instead of depending upon many who think they know what the farmers need to raise a

bale of cotton, a hundred bushels of corn to the acre, &c. Any one claiming such knowledge should be set down as a natural fool, and while penning the lines, I have my mind on one or two such. The great and important material for the farmer to look after is manure, i. e. return to the soil as much as possible what is taken from it, not the strong smelling ammonia, which is striving to get back to the air, but all the mineral elements it contains, indeed, everything found in the plant. It is true much of our land from over taxing, has ceased to bring forth the necessary vegetation which is so necessary to promote this desirable object a good pile of manure. Such a farm was found several years ago by a young man in an adjoining county who had fallen heir to it by the death of his grand-father. This place had been run down by constant cultivation in tobacco and corn until all profitable husbandry had long ceased; clover and grass had been long since forgotten. The click of no mower had ever been heard on the place. But presto, what a change in three years on this poor place: last season one hundred and twenty five tons of hay was harvested, leaving ample pasture, and now a large number of cattle enjoying their meal on good sweet timothy and clover hay, converting it into the best of manure to be transferred to other fields on the place, and thereby keep up the circulation. On this same place no ammoniated fertilizer has been used, simply dissolved bone ash, which all know has had every vestage of organic matter burnt out of it.

Thousands of acres in the same county, (Prince George's,) can be just as easy brought to the same state by proper treatment, and soon might be made the great milk and dairy county of Maryland, displacing the worthless tobacco, thousands of hogs-heads, of which lies in our market, and can hardly be given away, and for years it has been the agent by which the cream of the land, phosphates, potash &c., has been transported to foreign lands, until now the poor soil is crying for help! help! and so many unable to render any assistance, and where is the remedy? Only in elbow grease. Put the shoulder to the plow, get something to grow that will start the manure pile. Clover undoubtedly is one of the best things, as it affords food for beasts and when turned under food for plants, not by hoarding up nitrogen, but by extracting the sleeping elements from the subsoil, depositing them in the stems and leaves, and when the organic portion is consumed by the slow process of fermentation and rotting, deposits every necessary element for plants of a higher order, wheat and corn. How I have treated my manure pile for the last few years, to promote the decay and bring into activity the mineral elements, will appear in my next paper.

A. P. SHARP.

[We call the attention of our readers to the above well written article of Dr. S., and particularly the attention of Agricultural Chemists, who hold different views. The theory of Dr. S. is a departure from old theories, and if he be correct, will create a revolution in the scientific dogmas that have ruled for years in theoretic agriculture. The views of Dr. S. are expressed with ability and seem to be based on common sense principles and sound reasoning. They have, we learn, been sustained by recent actual experiments, which, we hope the learned doctor will furnish with further views on this interesting question. Eds. MD. FAR.]

For the Maryland Farmer.

Drilling Corn.

Some years ago when in New York city, I was advised if I wanted to see the sight, &c. to follow the crowd. This advice will prove of service in many things and in planting corn have followed the same rule. Finding throughout the great corn region, the crowd used the drill. Among some other valuable implements selected at the Centennial a corn drill was one. Finding a machine which I thought possessed many advantages and the maker being very liberal in offering it on trial, with the assurance that if it failed to do what they said it would, it could be returned at their expense, and to be paid for when satisfaction was given after a fair trial. It has not been returned, but cheerfully paid for after two seasons' trial. I am thoroughly satisfied that the true plan of planting corn is by the drill, with one stock to the hill, and have no hesitation in recommending such a plan of planting corn for the following reasons: The planting is done with very little labor, the drill dropping and covering the corn of uniform depth. The roots have a good chance of spreading out and seeking their food, which gives a rapid growth to the stalks, and every one producing a good ear of corn instead of being cramped and in each other's way as when two or three grains are dropped in the hill, one of which will prove the master, often leaving the other a small stalk with a nubbin on it, as I have often observed.

Corn planted the last season in the poorest field I have, gave me the best corn I have ever had, and with hardly enough nubbins to fatten a pig, and have never had the field in better condition free of grass, &c., thereby securing a free circulation of air, moisture and the warm rays of the sun, all so necessary to secure a good crop. The machine dropped regularly with no replanting or

thinning, all of which consumes labor and time adding to the expense, which the present price of corn does not admit of. We all know, with half a dozen stalks in a hill, no corn will be found at gathering time. The same rule holds good with two or three to the hill, only a little more show for corn. As a rule, follow the crowd is a good one.

Baltimore, Md.

A. P. SHARP

Sugar Beet in Maine.

We have been allowed by Mr. R. B. McCoy, of Harford county, Maryland, to make the following extracts from a letter to him by Gov. Selden Connor, of Maine, in reply to some questions put to him by Mr. McC. through Mr. H. B. Hallowell.

"The beet sugar business has an extensive literature of its own. A work by Dr. Crooke's is one of the best I have seen on the subject.

"At my instance the State offered a bounty of one cent a pound on all sugar made in this State from beets, grown in the State, the bounty to continue ten years, and not exceed \$7,000 in any one year, to such company or individual as should be selected for the contract. A contract was made last year with the Maine Beet Sugar Company, too late, however, in the season to procure the raising of beets to the desired extent. Enough were grown, however, to produce about 800 barrels of refined sugar, and to establish the fact that our beets were as rich as the the best in sugar, containing from 10 to 14 per cent of sugar, and that suitable culture would insure a yield of from 15 to 25 tons per acre.

"The company is now making contract for beets at \$5 per ton of unwashed beets (2,240 lbs). It was fortunate that the Beet Sugar Company was able to make a connection with an established sugar refinery; it thus has the use of machinery, &c., representing a capital of \$150,000. We, who are interested in this industry, believe that it will be a grand success in this State. The chief difficulty at present encountered is the fear our farmers have that the crop will not be profitable at the prices named."

"Persons who may be disposed to grow sugar beet for making sugar at home, or for furnishing sugar beet manufactories with the raw or dried beet, would do well to connect this enterprise with dairying and stock raising. There surely is money and improvement of land in this new enterprise, which we are zealously urging upon the attention of farmers who desire to leave the old worn-out systems, and get into ways that lead on to fortune in these days of progress."

Garden Work for April.

"Soft roll your incense *herbs*, and *fruits* and *flowers*,

In mingled clouds to Him, whose sun exalts,
Whose breath perfumes you, and whose pencil paints."

Thus Thompson, author of the Seasons wrote, and it is wonderful how the properly constituted mind chimes in with these beautiful sentiments, when it contemplates the garden in early spring—the budding fruits—the coming flowers and the growing vegetables, as well as the preparation of the ground for the other succeeding luscious and wholesome esculents, that a small stretch of fancy can picture them, as they soon will be, in all their perfection and beauty.

Corn.—Plant sweet corn at intervals of a few days in the order named, earliest variety of sugar corn, mammoth sweet, and Hyde's Egyptian—the best we ever eat,—though rather a late variety; plant in good soil, in drills 3 ft. apart, and stalks 1 foot apart in the drills. Adam's early, is a very early, small eared corn, not a sugar corn, but is nice and ought to be planted so as to come in before the sugar varieties.

Hot-bed Plants—like tomatoes, pepper, egg-plants and cabbage, as they get to be two or three inches high, should be thinned out, and those pulled out planted in the cold frames two inches apart, and again transplanted if possible before being set in the open ground. By these transplantings, they grow stocky and form a mass of roots and make far better plants to set out with certainty of doing well.

Sow seeds of *Parsnips*, *Carrots*, *Beets*, *Salsify*, *Radish*, *Lettuce*, *Spinach*, *Cabbage of sorts* should be sown this month early.

Onions, in sets and seed can be sown or planted at the earliest moment the ground is dry enough.

Ochra, *Beans* and *Cucumber* may be planted.

Potatoes, if not planted before, should be planted at the earliest moment.

Melons, *Lima Beans* and other pole beans, should have the hills got ready, for planting the first of May.

Sweet Potatoes, should now be put in beds for sprouting, see the excellent method of doing this described in another part of this number of the MARYLAND FARMER.

Sow all kinds of culinary Herbs—*Parsley* especially, as it germinates slowly. The dwarf double curled sort is best. We give a fine cut furnished us by Mr. Jos. Harris, of Rochester, N. Y., to whom we are indebted also for the cuts of "Boston celery," and his Globe Mangel, which also are given in this number.



PARSLEY EXTRA DOUBLE CURLED.

Celery Seed, should be soaked in tepid water 12 hours, and dried in plaster or meal, and sown in a rich bed, in a warm sheltered situation, to produce plants for summer planting—See cut of Boston market variety, thought to be the best sort of the white celery.



Peas, sow a few rows of Alpha, and Champion of England, the latter sown at the same time, will be coming in succession as the former is going out. There are other excellent varieties which, may be sown at short intervals. The *Marrows* are all large, rich peas, and should have a place in every garden. The edible pod peas, ought to be planted as they make a rich dish when boiled, just as the peas are half formed. Nip off the ends of the pods and boil them as string beans, they resemble in taste, tender bean pods mixed with peas.

Beds of Radish, Endive, Corn Salad, Lettuce &c., may now be sown.

Cider Vinegar and Sugar from Sugar Beets.

Sugar beets are a crop very easily raised, and in good soil the produce is abundant. All cattle are fond of the leaves which add much to the milk of cows, without giving it that bad taste which is unavoidable when they are fed with turnips or cabbages and which is chiefly owing to the greater rapidity with which the latter undergo the putrefactive fermentation.

The seed is sown in drills 20 to 24 inches apart, and thinned out to the distance of 6 to 12 inches from plant to plant in the rows. From four to six pounds of seed are required per acre, and they should be steeped 48 hours before planting; the best depth for sowing, is from three-fourths of an inch to an inch; the culture is similar to that of carrots or parsnips, and the cost for seed, labor and fertilizers will amount to about \$40 per acre.

The yield, according to the quality of the land fertilizer used and the cultivation bestowed, should average not less than 27 1-4 tons or 908 1-3 bus. beets per acre and 5 1-2 tons beet leaves.

Analysis shows that 1000 pounds of sugar beets contain 184 pounds dry substances, 1.60 nitrogen, 7.10 ashes, 3,914 potash, 0,379 lime, 0,536 magnesia, 0,780 phosphoric acid. In manufacturing, these elements are distributed as follows:—

	d s.	nit.	ashes	pot.	lime	mag.	p.	acid
T's & B's.	19	0.24	1.15	0.336	0.318	0.132		0.144
Fibre,	46	0.44	1.71	0.585	0.390	0.100		5.165
Refuse,	24	0.60	1.20	0.380	8.640	0.250		0.380
Molasses,	25	0.31	2.47	1.741	0.141	0.009		0.015
Sugar,	85	—	0.57	0.872	—	0.040		0.072

After harvesting, the roots are first topped, then washed and pulped in a grater, and pressed to extract the juice.

40 pounds pressure to the square inch extracts 60 per cent of juice, 80 pounds pressure to the square inch extracts 64 per cent of juice, 400 pounds pressure to the square inch extracts 80 per cent of juice.

Twenty-four pounds of pulp for every 100 square inches of press surface, is the best proportion to use. The cider press and grater, made by the Boomer and Boschert Press Co., of Syracuse, N. Y. is worked by power, and has a capacity with the labor of two men of grating and pressing one thousand bushels of beets per day of 10 hours, and yields 5000 gallons of juice.

The press and grater cost \$510, and require less than six horse power to run them, and the press is the best and cheapest there is for this use. The ordinary cider press will answer, but it costs more to run it, and not as much juice is obtained on account of its not being able to produce as much pressure as the other.

One bushel of sugar beets, mixed with nine bushels of apples, makes a cider richer and of superior flavor to that made from apples alone. Sugar beet juice can be converted into vinegar in the same manner cider now is; it makes a stronger vinegar than cider does, of equally good but different flavor, and if treated the same as maple sap or sorghum juice, it will yield a good article of brown sugar, and all of this not used by the producer in the brown state, would be readily purchased to be refined by the refineries already established. To refine sugar requires costly machinery, such as vacuum pans, centrifugal machines, filters of bone coal, &c., and also skilled labor, but the manufacture of sugar from beet juice, requires only the evaporating pan and the addition of some lime to the juice to neutralize the acid.

The best pan is that made by the Blymyer Manufacturing Co., Cincinnati, Ohio. 4 x 15 feet of copper costs \$210, has a capacity to evaporate 4000 gallons per day of 24 hours, and requires three cords of wood or its equivalent in coal. They also have larger and smaller pans, both iron and copper; the former being lower in price. I have no personal interest in presses or pans, and mention them, that each, for himself, can make an estimate of the cost of the machinery required, and what it will cost to convert his beets into cider, vinegar or sugar.

The estimated quantity of the sugar supply of the commercial world in 1875 was 2,140,000 tons of cane sugar, and 1,317,625 tons of beet root sugar, of which latter France produced 462,256 tons as against 1,565 tons produced in 1828 which shows the progress of this industry there. The consumption of sugar in the United States is about 700,000 tons, and is rapidly increasing. We now produce of cane sugar 100,000 tons, and of beet sugar 1,000 tons, and there is no reason why this cannot be increased to the quantity we require, if the farmers will raise the beets.

In France there is a heavy tax on the beet root sugar they produce, and cane sugar is admitted free, yet, notwithstanding these disadvantages, they successfully compete with it; here the reverse is the case—a heavy duty on sugar imported and no taxes levied on its manufacture; certainly under these conditions we should produce all the sugar we consume, and have a surplus for export.

After the juice is expressed from the rasp beet, the dry pulp remaining is an admirable food for cattle, sheep and swine. The average amount of pulp is 20 per cent of the original weight of the beet, and three tons of it for feeding purposes are equal to one ton of hay, and should be fed in connection with straw and oil cake or cotton seed

meal. As the pulp is fed back to stock, the land is constantly growing richer, all the mineral substances taken from it being restored in the manure; this enables the farmer to raise larger crops of various produce, and consequently keep more stock, which enables him to make more butter and cheese.

The present cider mills and cheese factories could add to their present machinery the pans or presses as required, and by co-operation on this, as in other products, we can produce profitably all the sugar we require. This will bring the business of sugar making within the reach of small farmers, and is of vast importance.

The notion prevails that to make sugar profitably it must be made extensively. This is certainly erroneous, and the sooner the illusion is dispelled the sooner we shall begin to realize the productive resources of our lands and employ our now idle laborers on a very remunerative crop now grown only to a limited extent. The introduction of the cultivation of the sugar beet generally, subsequently to be converted into sugar or vinegar, would be of great benefit to farmers. It would insure to them superior methods of agriculture, increased crops, more remunerative prices, and enhanced value of farms.

It would create industry, and diversity of labor, thereby increasing the general prosperity, intelligence and happiness of the community.

It would eventually reduce the prices of sugar, of bread, and of meat, butter and cheese, and render the United States more independent of foreign countries. One acre of land will produce 1000 bushels of sugar beets, which made into sugar will yield 4800 pounds sugar; or into vinegar 5000 gallons, or into proof spirits 1000 gallons; they are profitable to feed cattle, particularly to milch cows, in connection with hay, and the paper acquaints the farmer with the fact.

ANDREW H. WARD.

Bridgewater, Mass.

We are in receipt of the MARYLAND FARMER for March, it has 32 pages devoted to subjects of interest to the farmer, and 46 pages filled with advertisements; a regular guide book to tell the farmer where they may purchase everything used upon the farm. It is one of the best numbers yet issued, and fully carries out our statement made some months ago "that the FARMER, like old wine, improves with age."—*Marlboro Gazette*.

The MARYLAND FARMER for March is on our table. It contains an agricultural, apiary, horticultural, dairy, poultry, live stock and ladies' department, and will be found of great interest to the farmer. Published by Ezra Whitman, at \$1 a year in advance.—*Oakland Democrat*.

THE MARYLAND FARMER,

A STANDARD MAGAZINE.

DEVOTED TO

Agriculture, Horticulture & Rural Economy.

EZRA WHITMAN,

Editor.

COL. W. W. W. BOWIE, Associate Editor.

141 West Pratt Street

BALTIMORE.

BALTIMORE, APRIL 1, 1879.

TERMS OF SUBSCRIPTION

One dollar per annum, in advance.

TERMS OF ADVERTISING

1 Square of 10 lines or less, each insertion.....	\$1 50
1 Page 12 months	120 00
1 " 6 "	75 00
1 " 12 "	70 00
1 " 6 "	40 00
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Each subsequent insertion, not exceeding four	15 00
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OUR TERMS FOR 1879.

One Copy, one year in advance,	
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Club Rates, 6 copies one year in	
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" " 20 " "	15 00
" " 50 " "	35 00
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Subscription Price for One Year, if not paid in advance, will be at old rate, \$1 50 per year, and positively no deduction.

Special Premiums to Farmers, who may Canvass for New Subscribers.


Any person who sends us One Hundred Subscribers at \$1 00 each, will receive 1 YOUNG AMERICA CORN AND COB MILL, - - - worth \$40 00


For Two Hundred Subscribers, at \$1 00 each, we will give a Two Horse Iron Axle Whitewater Wagon, value \$100 00 These articles we warrant to be first-class.

TO ADVERTISERS

The large circulation of the Maryland Farmer makes it one of the best mediums for advertisers of all classes. Its circulation will be largely increased by our reduction in the Subscription Price, and hence add to its advantages as a medium for advertisers. The terms of advertising will remain as heretofore.


The Maryland Farmer will be read this year by more Farmers, Planters, Merchants, Mechanics and others interested in Agriculture, than any other magazine which circulates in the Middle or Southern States, and therefore is the best medium for advertisers who desire to extend their sales in this territory.

 We call attention to our Reduction in Price of Subscription.

 Our issue this month will be increased several hundred copies over the number for March.

DR. KENDALL'S valuable little book on the horse and his diseases, can be had at our office or sent by mail on payment of 25 cents.

GRAPE GROWING, ON THE SINGLE POLE SYSTEM; OR HOW THEY ARE CULTIVATED ON THE UPPER RHINE VALLEY, by A. H. Hofer. A treatise every grape grower should have. Price 50 cents, at our office or sent by mail postage paid.

 Our friends can do us a good turn by mentioning the MARYLAND FARMER to their neighbors, and suggesting to them to subscribe for it.

YOUNG MEN!

It is an easy way to make money by getting subscribers for THE MARYLAND FARMER. Send to cents for Specimen Copies, and ascertain what Liberal Commissions we will allow.

To the Agents of the Maryland Farmer.

We have had prepared a neat Cabinet Case, with a till or box and stand, to hold from 5 to 20 copies of the Maryland Farmer, Circulars, Bill Heads, Prospectus, &c. This Cabinet will be sent free to all of our Agents and to those who are willing to become Agents, or either the sale of single copies or to obtain subscribers. We want active Agents in every Town in the Middle and Southern States. The increasing popularity of the Maryland Farmer at this time, will make success easy for canvassers. All who are desirous to become Agents will please correspond with us at once as to terms. We shall complete our arrangements as speedily as possible for the supply to our Agents throughout the country.

THE AGRICULTURAL SOCIETY of Alleghany Co. will hold its next fair at Cumberland, on October 7 to 10, inclusive.

The Finksburgh Dairy Association, Carroll Co. has been recently organized, with L. A. J. Lamotte, President; Lewis Cole, Vice President; Granville Herring, Secretary.

The dairy business in this section of the State, has become an important industry, and we should be rejoiced to see Dairy-men's Associations formed in every county in this State, and throughout the South.

THE AGRICULTURAL CONGRESS.—The National Agricultural Congress, held its annual meeting at Nashville, Tenn, on the 25th of February—It proved to be a most interesting meeting. Elegant addresses were delivered, and able essays were read. We hope hereafter to give abstracts from most of them—President James, in his annual address, made some striking suggestions for the greater efficiency and usefulness of the Congress, by adding to its finances, which portion of the President's address was referred to a committee to take into immediate consideration, and report upon—We shall in future numbers give more of the details of the transactions, which have been crowded out this month by other matters. All the old officers were re-elected,

TOBACCO BEDS.—What "*bosh*," men often publish, upon subjects of which they have no practical knowledge. In an agricultural Journal which claims to be the *oldest* in the country, and sets itself up as a safe, expounder and teacher of practical agriculture, in its directions for those who may be inexperienced in the proper manner of growing crops, we find in its "Work on the Farm" for March, the following, and which we regret to see, has been copied in a weekly paper, which circulates in one of the largest tobacco growing counties of this State. The italics are our own. We feel it due to ourselves and to all tobacco planters to notice this extravagant formula for making tobacco beds. Old planters will have a good laugh over it and say, "that is 'book farming' for you with vengeance."

"*Tobacco beds.*—Select hitherto for extra early plants a gentle southern slope, soil light loam. For June planting and to make brown tobacco, northern hill-sides. Plant beds exposed to north winds are not so subject to the fly as those upon the southern exposures.—*To every square of twenty yards, after the bed is dug and the roots grubbed and raked out,*—the last raking to be done with an iron-tooth garden-rake,—*sow from one hundred and fifty to two hundred and fifty pounds of No. 1 Peruvian guano,* according to the state of the soil; dig the bed gently over again, rake and lay off in strips of four feet. Sow seed—*one tablespoonful of seed to every square inch of ten yards;* rake seed in, and gently pat the bed with a hoe or board made for the purpose."

What amount of guano would this be to the acre? What quantity of seed would this require for an acre? Ye young planters who follow the precepts of that wise, practical "*American Farmer*," make your calculations and give our readers the benefit of them.

TO CORRESPONDENTS.—We regret that we are compelled to let a dozen or more communications lay over for next month, for want of space and time—We have added this month to our usual number of pages,—some half dozen—to include all matter of immediate interest appropriate to the season.

The St. Michaels Agricultural Society met on Thursday 13th. There was quite a full attendance of members. The subject discussed was "The Division of Land into Fields, and the Rotation of Crops." The general tenor of opinion was in favor of the five field system, with one-fifth of the farm in corn, two-fifths in wheat, and two-fifths in grass, each year. Mr. Benson served a sumptuous dinner to the Society.

MOORE'S EARLY.

THE NEW \$60 PRIZE GRAPE.



AN EXACT COPY FROM A PHOTOGRAPH OF THE BUNCH.

HORTICULTURAL.

Moore's Early Grape.

A New, Hardy Grape, combining the following desirable qualities, viz.: hardiness, size, beauty, quality; productiveness and earliness, maturing ten days earlier than the Hartford Prolific, and twenty days before the Concord.

Description of the fruit: bunch large, berry round, large (as large as the Wilder or Rogers No 4), color black, with a heavy blue bloom; quality better than the Concord; vine exceedingly hardy; has never been covered in the winter, and has been exposed to a temperature of more than twenty degrees below zero, without injury, and it has been entirely exempt from mildew or disease.

It has received a large number of premiums and favorable notices from some of the most distinguished horticulturists in the Union. Its earliness commends it to every grape grower. Sold only by the originator, at Concord, Mass.

Sweet Potatoes.

This valuable crop has been hitherto too little cultivated as a market crop, except in limited districts where alone it has been supposed it would be grown with profit—and until a few years past, it was thought to be very difficult to keep it through winter. Both these old notions have been exploded. It can be grown wherever the Irish, or "White," as it is called in Virginia, can be grown, and in all the Middle and Southern States this popular esculent can be grown most successfully and profitably, and kept through the winter as safely as the Irish potato. It usually sells for more in the market than the Irish, and yields twice as much per acre. After digging the best for the market and a large supply of small ones, or what are called roots to sprout the next season, there is a great quantity of rich food left in the ground on which hogs will fatten and make the best of juicy meat, as Epicureans declare.

We strenuously urge our farmers to plant largely of this crop, for their own comfort and for profit. It is a luxury enjoyed by children especially and by all who like a pleasant, wholesome vegetable. We give a plan for preparing sweet potato beds for propagating the sprouts to be set out. This plan is that of Dr. G. J. L., of Hanover, Va.—the land of sweet potatoes, which we find in that excellent journal published by the Virginia State Agricultural Society, Richmond;

"Dig a pit on a southern exposure 8 feet long, 5 feet wide and 16 inches deep; plank or log up; have a cover made of common pine slabs to fit closely over it, or plank may be used, if convenient put on weather-board fashion; put at the bottom, at the time of bedding (which about here commences from 15th March to 15th April), 6 inches of oak leaves made moist, or corn-stalks, 5 inches of fresh horse manure well packed; next 3 inches of rich mould of earth; then place the potatoes as close as possible without touching, and then cover with 2 inches of fine mould. Some place pine-tags or wheat straw on top before putting on the cover to make a quick heat, but generally we have sufficient heat without it. Examine it twice daily, until you get sufficient heat, and if heat become too great raise the cover a few inches to admit air, and remove tags or straw if used. If not heat enough, take off the top any warm day, so that the sun can shine upon the bed, and cover before dark. This will generally sprout the potatoes in 5 or 6 days, and have them up in from 10 to 12 days. So soon as they come through, more mould can be thrown on 1 or 2 inches thick. Keep the bed well watered. The bed can, of course, be made larger or smaller, but the size given seems most convenient. You should bed early enough to get your crop out by 10th June, commencing about 10th May. Some of our truckers will plant 20 or 30 acres this spring."

PERSIMMON GUM.—It may not be generally known, says the *Rural Messenger*, of Petersburg, Va., that the common Persimmon tree of this State (*Diospyros Virginiana*) yields at a certain season a gum, which, when boiled and strained, afterwards being dried in thin layers, is equal in adhesive quality to ordinary gum arabic of the shops. The method is to cut with an axe or broad chisel cups in the body of the tree, from the root up as high as you can reach. Do this in the the spring, and in a short time the cups will be filled with the crude gum, which should be removed before becoming too hard. The gum should then be placed in a small iron or earthen vessel, and this be put in a larger one containing water, which must be raised to the boiling point, frequently stirring the gum in the meantime. In about an hour's time remove from the fire and strain the liquid through a coarse cloth to remove the sediment and impurities. Spread it thinly over the bottom of plates or dishes to cool and harden, after which it may be easily removed, and can hardly be detected from the gum of Arabia,

For the *Maryland Farmer*.

Experiments in Quince Culture.

The quince first attracted notice in the city of Cydon in Crete or Candia, hence its botanical name *Cydonia*. There are several varieties; some of which are used only as ornamental shrubs; some are only valued as stocks for dwarfing pears. The principal varieties of value for eating are the *apple-shaped*, embracing the well known orange quince; the *pear-shaped*, inferior in quality to the former; and the *Portugal*, of excellent quality but a shy bearer; and a large seedling variety that is much boasted of in these days of great things. My experience thus far is in favor of the orange quince. It is hardy, grows rapidly and bears abundantly.

I have now 22 trees that were propagated from cuttings only 5 years ago, that bore 3 bushels in 1878. The largest weighed ten ounces, and 33 filled a peck measure, heaped as long as they would lie on. The best of the trees bore to maturity 47, and would have borne more if they had not been thinned out one half when about the size of walnuts. The price of quinces for a number of years has been from \$2 to \$4 a bushel and scarce even at that. If they were cultivated and cared for with the attention of other fruits, I think they would be found among the most profitable crops.

Propagation by cuttings is easy and comparatively sure. They should be cut from the tree before the buds begin to start in spring. In February or March is a good time. I take well ripened wood of one and two years' growth, the older being the choice of the two, and insert in the soil about a foot to secure them against drouth; leaving 3 or 4 inches above the surface for the development of buds. Sticks half an inch in diameter at the base will be found to send out the most vigorous shoots. I had a growth in 1878, from a cutting one third of an inch in diameter, of 3 feet for the shortest branch, 4 feet for the middle and 4 feet 8 inches for the largest; about 2 feet is a fair average for the growth the first year. The growth onward will be according to the cultivation.

They begin to bear the third year from the cutting and yield a good crop the fifth year. I have now (March 1st) a medium sized quince that grew last year on a tree only three years old. The base of the tree is not larger than my thumb. It blossomed full; and I allowed but one quince to remain till the wind of a severe autumn gale broke the twig that held it, when as a curiosity it was hung up by a window in the kitchen, where it still hangs entirely sound.

My method of culture is to set the standard trees in rows quincunx, about 8 or ten feet apart, by

which I gain a row in 9, over, setting in squares, and yet keeps the desired distance. In preparing the ground, I dig a hole a foot and a half deep, about 3 feet across, and farther if there are longer roots to cover. I then fill in a few inches of rich soil, on which I set the young tree, covering the roots carefully with more rich earth; and if I have it, near the surface put a liberal mulch for the double purpose of enriching and guarding against drouth. Managed in this way, my trees uniformly live and make a vigorous growth.

Vineland, N. J. March 1st.

W. W. MEECH.

For the *Maryland Farmer*.

ROOT CULTURE.

The advantages of root culture to the soil in the alternating system, have already been alluded to in your valuable monthly; but this culture possesses higher claims to our notice than the bare influence of ameliorating the soil—it constitutes otherwise by far the best means of economically feeding the fattening farm stock, and adding greatly to the means of fertilizing the soil. It trebles the amount of cattle food, and doubles the quantity and quality of the manure. It moreover may be made to supply a large portion of human food.

Potatoes constitute a great portion of the bread and meat of the Irish peasantry, and there are no people more hale and robust than the Irish—feed their cows, fatten their pigs and poultry, and form an article of foreign commerce. The turnip has lately been an important crop in Germany. The beet culture in France now furnishes hundreds of millions of pounds of sugar for human consumption, while the refuse of the crop enables the French to enjoy the luxury of good beef and mutton, which were scarce commodities with them before the beet culture was introduced; and I hope the day is not far distant when the people of the United States will be far ahead of France in the manufacture of beet sugar. There is no land on the face of the globe better adapted to the raising of beets than the soil of Maryland. All the farmer requires is encouragement from the manufacturer; and if there are beet sugar manufacturers in Baltimore or the State of Maryland, I would like very much to know it and hear from them, as I am ready to raise beets for them if they will hold out sufficient inducements.

The field culture of the carrot has long been profitably adopted in the United States. In the culinary, or kitchen department the liberal use of roots, has in a great measure, become indispensable to wholesome diet, and while they are grateful to the palate and promotive of health, they greatly economize the expense of bread and meat.

Five things are required, or are essential in the culture of root crops: First, a dry soil. Second, a rich soil. Third, a deep soil. Fourth, a well pulverized soil. And fifth, a good after-culture. The crop will be abundant in proportion, as these several requisites are regarded and deficient in proportion as they are neglected. By a dry soil, I mean a soil that is not *wet*. Moisture is beneficial to all crops, and is indeed indispensable to their growth; but water is detrimental to all root crops, though it reposes on the subsoil, or appears but occasionally upon the surface. Hence when roots are to be grown upon soils that are tenacious or flat, or upon those which repose upon an impervious subsoil, the land should be either previously under-drained, or should be thrown into ridges and the furrows kept open for the free passage of the water in heavy rains.

A rich soil is as essential to good crops and particularly to root crops, as nourishing and abundant food is to the fattening of farm stock. We all know that lean pasture and coarse forage, although they may keep, will not *fatten* cattle. It is equally true that although farm crops will live and grow upon a poor soil, the product and profit will be great only on a rich one. The advantage to the crop, as well as the animal will be in proportion to the quantity of organic matter which is converted into living organic matter—into vegetables and into meat. More earthy matters enter but minutely or adventitiously into the structure of either. Hence the maxim verified by experience, that it is better to cultivate one acre of rich land than three acres of poor land. The expense of cultivating the latter is three fold that of the former; while the product of the rich acre is often equal to the product of the three poor acres. Ordinarily speaking, a good dressing of manure will double the root crop. I consider that a deep-worked soil is necessary for all but the potato crop, and even to this it is highly beneficial, that the deep roots of the beet carrot and turnip may not only penetrate freely and increase their length and their volume, but their radicles—their mouths—which are principally their lower extremities, may there find food for the plant. Grow the turnip and potato in a deep tilth, send down their roots to a great depth in search of food and moisture. This may be seen upon the borders of a field where the soil has been superficially ploughed and where the product is always inferior and most liable to suffer from drought.

The *pulverization* of the soil is essential to the germination of the seed, to the ready extension of the roots, to the free circulation in it of air and

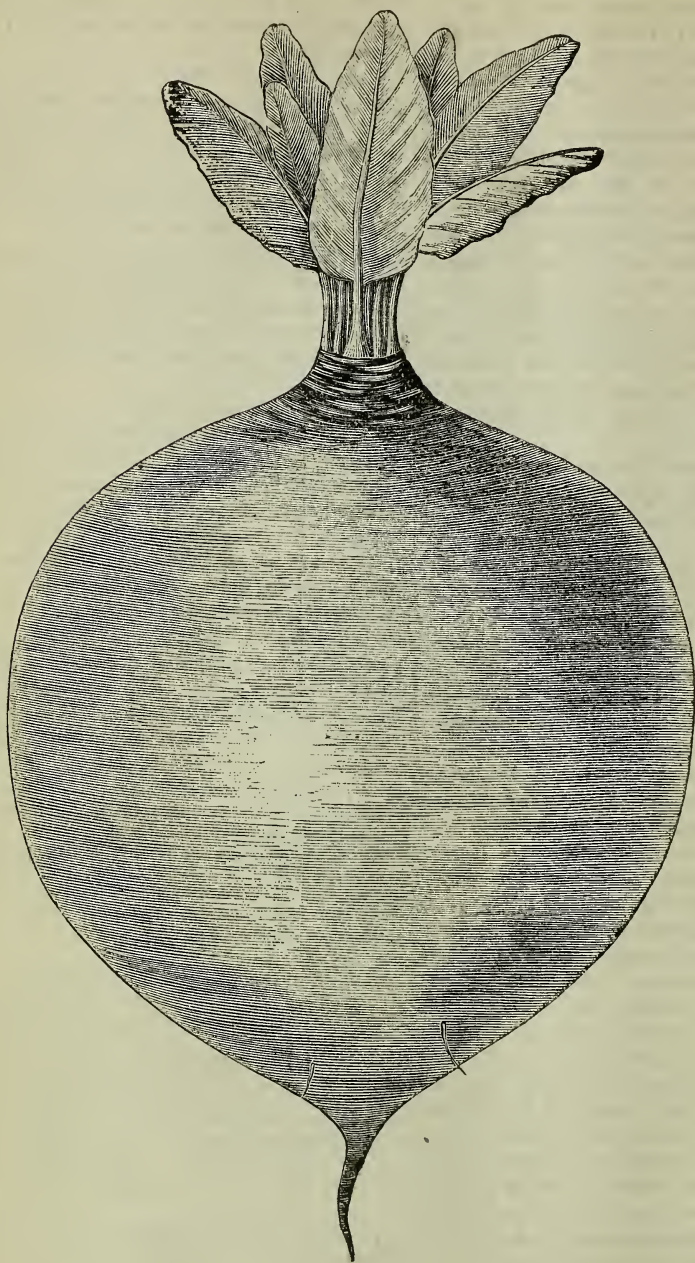
moisture, and the admission of solar heat, all contributing to prepare, and transmit the food to the growing plants. If the soil is lumpy or coarse, and does not come in close contact with the seed, to keep it moist, the seed cannot germinate; the roots cannot freely extend in search of food; nor can this food be properly prepared, and transmitted to the plant, unless the soil be pulverized, as to permit the free circulation of air and moisture through all its interstices and through its mass. The air and dews are charged with the element of fertility, and the more freely they are permitted to penetrate the soil, the more benefit will they impart to the crops. Good after culture implies, the keeping of the ground free from weeds, which rob the crops of its food.

Thinning the crops, or plants to a proper distance, and keeping the surface mellow, or open to the atmospheric influence. Though a soil is dry, and rich, and deep, and well pulverized, the labor of the husbandman will yet not avail much, in root crops, if he neglects either to destroy weeds, to thin, when necessary, his plants, or to keep the surface loose and open. But these latter requisites to success may be easily got along with, if they are attended to in time, and *with proper implements*. The potato ground should be well harrowed, to destroy all the young weeds, and so pulverize the surface before the shoots have all broken ground. It may afterwards be almost wholly managed with the plow and cultivator. The beet, carrot, and ruta бага, if sown as they should be, in rows, should be cleansed in like manner, and for like purpose with the cultivator, as soon as the rows of young plants can readily be distinguished. One hours labor in this way, will destroy more weeds, and correspondingly benefit the crops, than three hours labor will effect upon large weeds. It is easier to destroy the *acorn*, than it is to *eradicate the oak*.

Crowding plants, is like overstocking a pasture, or endeavoring to make fat cattle from half rations of food. It is divided among many, that food which is requisite to perfect one. It moreover tends to exclude light, heat and free circulation of air, essential to the development of vegetables, and the perfection of their growth. Hence a moderate number of plants, will give a better product than a great many, upon the same ground, in a crowded state, *or situation*. This is a hard lesson to teach to some farmers in regard to root crops.

J. H. E.

[There is no beet manufactory in Maryland—There should be. We believe it would be one of the best enterprises, capitalists could invest in—The company would be furnished with all the beets they could use up, if the farmers of the State only could have an assurance that they would receive a fair price for their crops when grown. —Eds. MD FARMER.]



HARRIS' YELLOW GLOBE MANGEL WURZEL.

The Poultry House.



For the Maryland Farmer.

POLISH FOWLS.

Perhaps very few people, outside of those who make poultry breeding a study, are aware of the peculiar advantages of the Polish. Many who raise poultry prefer the clean cut look of the Game or Hamburg, and object to the huge crest and beard which is the prominent characteristic of the Polish. Others want size, and give all their admiration to Brahmas and Cochins, whose immense frames make them the giants of the yard. But, without detracting from the claims of all these birds, both for beauty and use, let me call the attention of fanciers to a few points on which the Polish can raise a foundation of regard and liking. First, they are easily kept in small and restricted quarters. To many persons, with a genuine love for fine poultry, this is a great recommendation, as their circumstances will not allow them to have extensive runs. The Polish are the fowls for them, and it is reported of one of their admirers that he said, "he could raise a Polish cock in a barrel, and win a prize with him. Secondly, they are very small feeders. The food required to support a Brahma or Cochin will if properly varied, keep a trio or more of Polish in splendid condition. I have often seen Polish hens, who were laying daily, who ate less than a Bantam. Thirdly, they are great layers. I do not wish to exalt them as rivals of the Leghorns, for no egg-laying machine could do much better than a Brown Leghorn hen. But place the two in a small range, and the Polish hen takes the lead at once. The Brown beauty wants her field to travel over, and circumscribe the space

in which her restless feet may exercise, and the production of eggs diminishes to a great degree. But eight feet by twenty-four, and a weekly run out for a few hours, and the Polish hen will shell out her eggs as regularly as if she had an acre at her disposal. Fourthly, they are easily tamed and gentled. Be careful to accustom them to your voice and step; do not come upon them suddenly and startle them, and they will soon learn to come round like cats and eat out of your hand. Fifthly, their beauty. For though fanciers, as a rule, have special favorites, and only look with a negligent air of commendation on fowls not of their pet breed, the public who knows nothing about the peculiar markings which demand praise or blame, all admire the beauty of the Polish.

There are really now only seven varieties of Polish which are recognized by the standard, namely: White Crested Black, White Crested White, Plain and Bearded, Silver Spangled, Plain and Bearded, and Golden Spangled, Plain and Bearded. There was at one time, as stated by Wright, the eminent English fancier, a variety of Black Crested White, which is now extinct. Efforts are said to be in progress to restore it, but so far they have failed. A prominent fancier of this country is said to be creating a strain of Black, Crested and Bearded, but they are not yet recognized. Another variety, bred by a large number of fanciers, but not as yet recognized by the standard is the Buff, a variety which was probably produced by a cross between the White and the Golden Spangled.

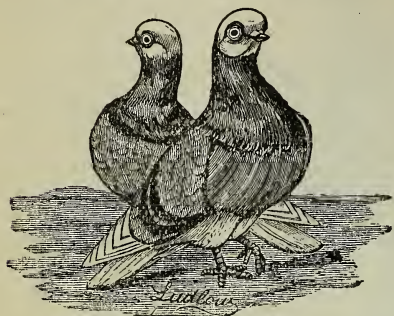
At some future time, if the subject interests your readers, I will be glad to give a description of the coloring and style of the different varieties, and also an account of fowls which are equal favorites with me, namely, the breeds known as French

T. B. DORSEY.

[We shall be pleased to have our esteemed correspondent write to us on poultry or other subjects, as often as his convenience will allow—We feel sure our readers will be interested in what he writes, especially when we say he is a poultry fancier, who has large yards of the choicest sorts, and has been often a highly successful winner of premiums at the different Poultry shows in this State, the District of Columbia, and wherever his stock has been exhibited.]

The MARYLAND FARMER for February reached us with its accustomed punctuality. The correspondence both home and foreign is very interesting. It contains articles on almost every subject in which the agriculturist is interested. Every farmer should subscribe for it. Published by Ezra Whitman, Baltimore, Md., at \$1 per annum in advance.—*Frederick Examiner.*

PIGEON COLUMN.



THE TUMBLER.

The Tumbler is a medium size bird with rounded heads, short beaks, and pretty little red prancing feet; they are the very pets of the pigeon fancy. In color the Tumblers vary very much. There are blues, blacks, and other self colors; then some have white heads—these are termed bald heads. Others have a white mark below the under bill, so they are termed beards; but the variety most valued is that termed the Almond Tumbler. In this breed every feather of the plumage is variegated with black, yellow and white—the yellow forming the ground color. These Almond birds are reared only by experienced fanciers, the beaks are so short that they are hardly able to bring up their own young, and others have to be employed for the purpose. Birds of this extreme character are suited only to experienced fanciers; but the ordinary flying tumblers, both those that tumble indoor, and in the open air, are the ones best suited to the young fancier. They are good breeders, active and joyous on the wing, constantly turning somersaults in the air, and able to fly home, if trained, some fifteen or twenty miles with ease.—*The Fanciers' Weekly.*

PURE IMPERIAL SUGAR BEET SEED.—It may not be known generally that while all sugar beets will yield sugar, yet there are some varieties much richer than others in saccharine matter. Best variety for sugar making, is smaller in size than the common sugar beet grown for cattle feeding, yet will yield an average of 15 tons per acre on rich ground.

Mr. E. Theo. Gennert, who has in charge the Beet Sugar manufactory at Portland, Maine, seeing the importance of pure beet seed for sugar making, imported lately a quantity of seed from Germany, that all who wanted to try this new industry, could be accommodated with the pure article at the lowest prices. See advertisement of this seed in this number of the MD. FAR. on the second page of cover.

THE DAIRY.

For the Maryland Farmer.

Butter Breeds and Crosses.

BY D. J. EVANS, JR.

The introduction of the Jersey and Guernsey cattle has worked great revolutions, in this country, in the quality of the butter produced, and consumers can always get a good grade of butter at fair prices. For awhile many supposed that the only way to secure the greatest good from these animals, was by having a herd of pure bred ones, and the expense of doing so, deterred many from making the attempt, but, ere long, the grade or half blood animals began to come in, and it was then, the farmers found out how to vastly improve their animals, secure the high qualities of the thoroughbred, and at a moderate outlay of cash. It is not only very gratifying, but is, under favorable circumstances, profitable, to have a nice little herd of registered animals, but the number of farmers who can do so, are in the minority. By breeding choice, pure-blood bulls to the many choice, common-blood dairy animals found on most of our farms, grade or half blood animals are produced which, often exceed many of the registered ones, in point of butter yield. The reason for this is simple enough, for it is merely the comingling of the high qualities of the sire with the strong native blood, the result being that the greater strength of the latter intensifies or increases the desirable qualities of the former. We have seen many grade animals worth far more, as butter makers, than many registered animals we could name, tho' this is not always the case. The average Jersey is no doubt a small animal, which is the objection urged by many, but they invariably make up in quality what they may lack in size, and our experience with stock of different kinds, has convinced us that in no single breed can we find all the good and desirable qualities combined, and, to fully develop any breed, we must breed for a special purpose. This is what has produced our different breeds. As a breed to cross with our ordinary dairy stock, the Jersey cattle are most excellent, and the offspring usually are larger than the average Jersey cow. The Guernsey breed of cattle, which are now coming so prominently before the public, are a larger and coarser boned animal than the Jersey. They are not quite so pretty to look at, but they justly claim superiority when it comes to the butter question, as they produce butter of that desirable waxy texture so much sought after by the consumers, who usually are judges of good butter. Until recently there was no herd register for these

animals, but now we have one, and a good one, and they have taken the position amongst thoroughbred animals that they so richly deserve. In color they are fawn or yellow and white, the white often predominating, and have been, for many years, bred more for their qualities as butter producers than as handsome show animals, utility being of paramount importance and beauty of form or coloring only secondary. A good animal of this kind often gives color and quality to the entire product of a dairy of good, ordinary animals. The Guernsey grades or half bloods, partake largely of the desirable features, and we have grade animals of this kind, which, would be called extra by any one. We also have grade Jerseys, which we value highly, but prefer the others named. Farmers cannot make a very great mistake by breeding to either the Jersey or Guernsey. The former, being in greater numbers than the latter, can be more easily used. Breed only your best cows to them, save the heifer calves from them; feed and care for them in the best possible manner, and you will have dairy animals you can justly be proud of. It may be a slow way to get up a good herd, but then you must spend the time, if you have not the money, and we have always found it time well spent—improving any of the domestic animals we have.

Will a Village Cow Pay.

"Will it pay to keep a cow, in village or city?" asked a reader of the *American Agriculturist*, a professional man, living in a village. He "has a stable, can get pasturage during six summer months at 37½ cents a week; a boy will drive the cow to and from pasture, and milk her night and morning, and feed and milk her in winter for one-sixth of her milk. Hay costs \$12 a ton; bran, 1¼ cents per lb. I can buy milk at 4 cents per quart, or sell any surplus to neighbors at the same price."—A fair cow ought to average 10 quarts a day, 270 days in the year, or 2,700 quarts. Deducting one sixth, or, say, 500 quarts, for the boy, leaves 2,200 quarts, at 4 cents, equal to \$88. Six months' pasturage, \$10; about three tons of hay, \$36; 1,000 lbs. bran, or 6 lbs. a day for six months, \$30. Total cost, \$58. Profit, \$30. The value of the calf and especially of the manure, should be worth much more than the risk and any depreciation in value. At these figures of cost, the cow would pay \$8 profit, reckoning the milk at only 3 cents per quart. The best profit would come thus: Buy in spring a fresh milch-cow, a fair milker of common breed; keep her from breeding; milk her 6 to 8 months, or until she ceases to give 7 quarts or more a day; then dry her quickly, feeding a few bushels

of corn meal, until she gets in good condition for beef, and sell her to the butcher. Farrow cows thus treated, take on flesh very rapidly, and make very good beef, if only 6 to 8 years old. They will sell for nearly as much for beef as they cost in spring, and the winter's keep, and loss of three months' time are saved. We much prefer a farrow cow's milk, especially for younger children. A fresh, good milch cow, bought in autumn, will yield fairly during winter, and though farrow will keep up milk on summer pasture, and can be *beefed* in autumn, or when she fails in profitable milk-flow. We should keep our own farrow cow, even if compelled to reside in a city, hire a stable, and feed hay, meal and bran through the year.—*American Agriculturist for January.*

OUR LETTER BOX

Ensilage, Beet Sugar, &c.

CAMBRIDGE, MD. March 15th, 1879.

Messrs Editors of the Maryland Farmer:—I have read with care and pleasure the excellent article by Mr. F. Morris, on "Preserving Green Forage Crops," I consider it worthy of the notice and practice of every farmer. I have fully made up my mind to give it a thorough, careful test, and report to "the MARYLAND FARMER." I shall also try the French plan, of storing the green forage in mows, and putting layer and layer about of bright oat or wheat straw, and also report to you.

Permit me to ask you a few questions: 1st. In laying down meadow for sheep pasture, what varieties of grass seed would you recommend? What can ordinary sheep be bought for at the Batlo. Stock Yards? I propose buying, and turning a thorough bred buck with them, and after getting their lambs and fleeces, sell the old ewes for mutton.

If you will be so good as to answer these questions, you will very much oblige me

I wish you would, through your paper draw the attention of the farmer—and the farmers of Eastern Shore, to this matter of raising the sugar beet. I think if this matter was worked up and pushed, it will yet form a grand thing for all classes.

I am going to try a half an acre or more, and hope to make a great deal of sugar for house use, and the pomice and the balance of the roots I may not grind up, I will have to increase my cream and butter, and place fat on my cattle. God bless you and your cause—Sincerely yours, F.

In reply to the queries contained in the above kind letter, we should sow on well prepared and enriched ground, for a permanent sheep pasture, 2

bushels orchard grass, 1 gallon red clover. To have a more complete pasture for sheep, we would say, 1 bushel of orchard grass, 1 gallon red and 2 lbs. white clover, 3 lbs. meadow fescue or 6 lbs. of sheep's fescue well mixed with plaster. This is a formula for one acre—use salt and plaster as a top dressing once or twice a year—say 3 bushels and 1 of plaster per acre. The cost at present prices, for the first recipe would not exceed \$3.50 per acre, of the second not over \$4.50.

Good, fair sized, young stock ewes can be bought for from \$2 to \$2.50 each—Sometimes great bargains are to be had at the Stock Yards, through the agents that are reliable men. The prices vary from day to day, and from various reasons. Pure blood bucks range from \$15 to \$80, and always pay well for their outlay, if no accident occur.

Kind Words.

A long highly valued friend from Harford Co. in renewing his subscription to the MARYLAND FARMER, thus utters a sentiment which we would like to be *contagious* and everybody practice it. "I consider it a duty, which never should be forgotten, that is to *pay the printer in advance*." We thank him for the following kind words:—"That the FARMER may continue as it ever has been, true to its mission, and that its prosperity may be perennial, and that my old friend—I do not mean *in years*—"Patuxent Planter" may continue to flourish, and the ladies continue to cheer him with their smiles and kind words, * * * * is the sincere wish of Yours very truly,

W."

If we had the liberty to give the name of our old friend, it would be seen that these encouraging words come from a distinguished farmer, and much honored son of Maryland.

A Fine Calf.

MILLINGTON, MD.

Eds. Md. Farmer:—P. Hendrickson, proprietor of Locust Hill, Hay and Stock farm, situated one mile north of Millington, Kent Co., Md.—a live town on the Queen Anne's and Kent R.R.,—has a calf, which at one day old weighed 84 lbs.; 1 week old, 102 lbs.; 2 weeks old, 118 lbs.; 3 weeks old, 138 lbs.; 3 weeks old, 160 lbs. This calf is a pure Hereford, bred by Dr. W. H. De Courcy, of Wye Neck, Queen Anne's Co., Md. Its mother was bred and raised by the Doctor, being purchased of him in September 1878, by Henry Clay Hendrickson, son of P. Hendrickson.

H. C. H.

THE APIARY.

For the Maryland Farmer.

CHARLOTTESVILLE, VA., March 1879.

I am aware that I have exceeded the original limits I had prescribed for myself, in seeking to create a more general interest in what has been to me a delightful pursuit, and not without profit.

It was not my purpose to write a complete dissertation on bee management, nor yet any history of the "Blessed Bees," as Mr. John Allen has done. As I have progressed thus far, it may be well in behalf of some of your readers, to say a few words regarding increase of colonies.

As I am not writing for the specialist, I will not describe, nor recommend any plan of artificially increasing numbers, for in general, natural swarming will be relied upon. It must be observed that large storage of honey, and great increase in the number of colonies, are entirely incompatible. And, that the tendency to swarm may be largely checked, and very often prevented entirely by a timely use of the extractor, and by affording abundant room for the surplus comb honey.

If one can devote but limited time to management of the apiary, there is no profit in multiplication of colonies.

For the old maxim of "a little farm, well tilled, &c." applies to this pursuit, and two colonies skillfully managed and kept strong, will be found more profitable than a larger number neglected. The specialist has the ability to increase in such rapid strides, that he can readily build up to any desired number. But for those whose time is limited, and yet desire the best reward for that time, increase is not recommended.

In the spring, it often happens that bees left on their summer stands, are largely reduced in numbers, so that they cannot cover nearly all their combs. Such should be aided by crowding up the division board, and securing frames until increasing numbers demands expansion. In hiving small swarms, it is also a great advantage to these, to restrict the space, unless the weather be quite warm.

In no case, should surplus boxes be put on to the hives, until the real honey season has come, and that is not the time that fruit trees bloom.

Fruit trees afford some honey, but the amount is limited, and there is nothing there, until the Linden, Poplar (*Liriodendron*), or white clover bloom appears. Then put on such a rack as has been described, filled with sections all

having starters of natural comb, or of artificial comb foundation, and one or two of them, it would be well to have filled, shear down either side with empty or filled combs, to induce the bees to at once go up and work. We who are managing in this manner, always have a sufficiency of incomplete combs left over, which are carefully preserved. But pieces of white clean comb can be cut out of the frames if needed, for this purpose. All bits of clean nice comb, should always be saved for starters.

After the bees have commenced work in the rack, if the season is favorable, it will be necessary to very soon—the period may be determined by lifting the quilt, which should fold closely on top of the rack and looking down—to lift the rack and insert another directly under it, which is the process called tiering up. The time to do this, is when they are working in every part of the first rack, and have sealed over a part—say one half of the combs in sight under the quilt.

It often takes a longer time for bees to repose honey, and cap it than to fill the combs, and in seasons of activity, the writer has had to insert a third rack before the top one (1st) was fully sealed.

In dull seasons when honey comes in slowly, it will do to take out single sections as completed and replace with new ones, with starters as before. When it is borne in mind, that we have recorded instances where single colonies have brought in seventeen pounds in one day, it will be realized the necessity of providing room at the right time.

An excellent plan for those who can do so, is to have one hive suspended on scales, that the daily increase may be noted, or to have one fixed to weigh readily with steelyard or spring balances. Early in the season, when honey is coming in very fast, if it is stored below, as it is likely to be very often, if the combs in the hive are not largely occupied by brood in different stages of development, it is very essential that the honey be extracted, that the queen may have room to deposit her eggs. For if numbers be not well kept up by this constant succession in the brood chamber, large success cannot be attained.

Where extracted honey alone is desired, common frames can be hung in the second story, and all the extracting done from that, excepting so much as may be needed to afford the queen room below. About 50 bees are produced in every square inch of worker comb, and very prolific queens deposit eggs often at the rate of 3,000 per day.

In reply to A. M. C. the writer will say, that he has sought to have one of the manufacturers advertise in the *FARMER*. If none appears in the next number, he will on receipt of a stamp, advise him or others in time. At some future time the writer may enter the field to supply the wants, and will advertise. In the meantime, if any desire to make their own hives, racks, &c., and yet do not understand the directions given, we will try and furnish one of each to work by, if they will communicate with him.

J. W. PORTER.

THE MARYLAND HORTICULTURAL SOCIETY held its March meeting at the Academy of Music.

For exhibits, premiums were awarded W. H. Perot, James Pentland, Alex. Scott, W. H. Wehrhane, A. L. Black, S. Feast & Sons, A. Brackenbridge, E. Hoen, A. Hoen and R. W. L. Rasin. The flowers exhibited were various and beautiful. Mr. James Pentland read a paper on window gardening, giving very seasonable directions for indoors cultivation of plants and flowers. Mr. Pentland's lecture was highly interesting and well received by his hearers.

Among the plants best adapted to window gardening he mentioned ferns, calla, lillies, zonale geraniums', Chinese primrose, honey bell, dracenas, cyclomes, begonias, arbutalums, palms, cintronas, hyacinths, tulips, azalias, camellias, smilax and ivy. Mr. Perot made a few remarks on the same subject, and the meeting adjourned.

SEED CORN.—We consider that the selection of prime seeds in all grain crops, is important, but especially so in corn. When we come across a good article, we feel it an imperative duty to inform our readers, that they may avail themselves of the opportunity to try it, at least on a small scale. "Good corn does not consist in having a large cob and little corn, but a small cob with large grains which will turn out well in shelling, such an article can be found in the 'Horse-tooth Corn,'" Having examined a number of ears, the following is a fair average of them. An ear weighing accurately 13 ounces, gave 11½ ounces of corn, indicating over 60 lbs. out of 70 lbs. on the cob,—4 lbs. over the standard, and taking only about 80 ears to the bushel of 56 lbs. shelled corn. A selected ear from other corn of about the same size, gave 56 lbs. out of 70, and took 120 ears to make a bus. This corn has been selected by Mr. A. H. Lindsay of Virginia." This is what a distinguished agriculturist has put on paper at our request. He called our attention to this corn, having secured some for his own use the present year on his farm. We rarely have ever met with a sample of corn which promises so much as this. The ears are not above medium size, shell immensely, the grains being large and deep, resembling what it takes its name from—See advertisement of this corn in this number of the *MARYLAND FARMER*.

LADIES DEPARTMENT.

Chats with the Ladies for April.

BY PATUXENT PLANTER.

"Now the golden morn aloft,
Waves her dew-bespangled wing,
With vermeil cheek, and whisper soft,
She woos the tardy spring;
Till APRIL starts and calls around
The sleeping fragrance from the ground;
And lightly o'er the living scene,
Scatters his freshest, tend'rest green."

Thus sung Gray years ago, and as April was then so it is now; full of changing moods as a coquettish woman — smiles and tears, — sunshine and shower, — cool and gushing, disagreeable and charming, rude and gentle, all by turns, and yet the month that is each year longingly looked for, as a period of promise, which is given in the swelling buds of the trees and the opening flowers. Should April be cold, we should rather rejoice if the old proverbs be true — "a cold April, the barn will fill," and "when April blows his horn, its good both for hay and corn."

"NATURE in its young greenness at this season of the year is as fresh as girlhood. The air is fragrant and the orchards are gay with apple blossoms. All the world is in its garden, training its vines, propping its nurslings, earthing its plants, and watching with eager interest the rapid evolvments of Nature's great drama. How vigorously indeed are the subterranean forces at work! How the juices course, the buds burst, the leaves unfold, and the roots sprout! Out of the dark colorless depths of loam, and sand, and clay, the sun and the rain are spinning fine tissues, and weaving a vast, all-beautiful robe of green for the face of Nature! What a laboratory is Earth, and a grand chemist is the Sun! How wonderful, indeed, is the ever-recurring mystery, by which out of dust and ashes spring these myriad forms of beauty, these many colors and tints, these fruits and sweet odors!"

Let us, my fair friends, embrace this propitious season, and set the flower garden in order. Do all the work we can do in forwarding the hopeful assurance of an abundance of beautiful flowers and shrubs in great variety, at all seasons of the year, from now until December. Do not neglect the flowers once so valued by our ancestors, in the hope that the novelties of the day will far surpass them. It is well to test a few of the new sorts, but they are often 'far fetched and dear bought.' There are a great many of the old flowers, and shrubs particularly, that can never be surpassed—

many have been improved by skill and high art, in their size and sometimes in color, and some changed from single to double, but often these changes are made at the expense of other essential qualities. Perfume is often lost in securing greater size or change of color, and indeed, it is rare that new roses or other made-up flowers, have the delicious, undefinable sweetness of odor, that the original flowers of the olden time had. The improved peach has not the fine aroma that the uncultivated small peaches have, yet they are far more valuable, it is true, for other qualities. So, too, the little wild strawberry which hides itself amid broomsedge on some warm sunny slope, is richer in taste and more delicate and more highly perfumed than those gigantic cultivated ones, which, it is true, are wonders to behold.

The seeds of Annuals are very cheap, and a good collection of these will give much satisfaction. Mr. Vick says: "To the Annuals we are indebted for our brightest and best flowers in the late summer and autumn months. Without the Phlox and Petunia, and Portulaca, and Aster, and Stock, our autumn gardens would be poor indeed; and how we would miss the sweet fragrance of the Alyssum, Mignonette and Sweet Pea if any ill luck should deprive us of these sweet favorites. Many of our beautiful climbers, such as the Convolvulus and Cobea Scandens, and nearly all of our everlasting and ornamental grasses are included in this section."

Your bees, pigeons, poultry and dairy will each require much of your time, particular care, and furnish you with much delight and great profit; Let me impress upon every lady that the art of making good butter is easily acquired, not by listening to neighbors who are full of advice, each one giving different directions, and none ever having made a really prime "gilt edge print" in their lives, but read what experienced, practical butter-makers say and what the great creameries do, and follow their instructions, and you will soon learn to make butter that will bring 75 cents to \$1 a pound the year round—netting to you, at least, 50 cents per pound if you have to rely upon middle men in the towns for its sale.—all this information you can get by reading attentively the Dairy Department of the MARYLAND FARMER. One thing has been settled beyond dispute, that salt has a vast deal to do with the flavor and keeping of butter, and that no salt is fit for butter except the "Ashton" salt, and see that you get it from some reliable merchant, for other brands are often imposed on the most particular dairymen. It is only a trifle more in price, and is sold in small quantities to suit purchasers. It is wonderful what a difference there is in the

butter from the same churning salted with this particular salt, and that salted with the common salt. Butter-merchants of large experience, it is said by those who know, can tell the difference the moment they taste it. More anon about the dairy. Let me call your attention to one of the, if not

the best Zonales ever yet sent out. Mr. John Saul of Washington city, has furnished the cut given below, but it gives an inadequate idea of the immense trusses, the brilliant scarlet color and other admirable qualities of this new Zonale. Price only 20 cents. It must be seen to be fully appreciated.



MR. SAUL'S NEW ZONALE GERANIUM.

For the Maryland Farmer.

To-morrow.

"It is a period no where to be found
In all the hoary register of time."

Boast not thyself of to-morrow, is as unheeded by the world to-day, as it was two thousands years ago, when first spoken by the Israelitish King.

Who does not plan for to-morrow? All mankind hopes, and waits, and fears to-morrow, ever forgetting that

"To-morrow never yet,
On any being rose or set."

Oh! the dim, the mystic future, a portion of it is still before us, but whether it holds in its mysterious hand, garlands interwoven of bright-hued flowers, or dark shaded wreaths of the cypress and

willow. "Time alone in his tireless flight, will reveal to us." Be it joy or sorrow, good or ill, we shall still sigh over the past, and weave bright dreams of the future.

Hope, is our guardian angel, "o'er life's stormy sea;" let the night be ever so dark, she holds out her beacon light and cheers our weary steps.

"Sometimes, hope's light grows dim, as with bowed heads, and saddened hearts, we refuse all comfort, and yearn to wear a martyrs crown. Joy can no more paint on life's canvass, bright picture of the future. Fear has seized the palette and all is gloom, and only a weary waste of loneliness stretches out before us— but like the restless bird that folds its wings for a moment in the bowers of green leaves, soon it is speeding far away, seeking rest and finding none, so hope's light that always

brightly burns for the world-worn, and world-weary, aids us, and in the dim vista of the future, a glimmering ray of light struggles through the dense cloud—banks, and gives promise of rest and peace in after years, so we are ever looking to the future and building castles for the *to-morrow*.

Life is hopeful, ever hopeful,

In the future visions bright,

Paints the rainbow's gorgeous colours,

On the darkest clouds of night.

WICOMICO.

For the Maryland Farmer.

THE GRANGE.

The Granges of the Western Shore of Maryland appear to have hit upon the *great question* of questions in the discussions which have been held at recent meetings, viz: *Taxation*,—its burden, and the proper measures to reduce it.

The investigation of this question in its various ramifications—official salaries, perquisites, fees, official corruption and extravagance; proportionate, efficient and proper representation in deliberative bodies, economical administration, and the formation of correct opinions in the Grange—among the intelligent and thinking men who compose it, and their wide-spread promulgation, will effect a revolution in modes of government, whose results for good to all classes of the people, no man living can estimate.

The number of the agricultural class, their intelligence, their vast political power, their patriotism, their independence of official position, and their stern tone of fair play and justice in every department of human effort, justify us in the prediction that when the agricultural masses ascertain the true situation—when they look intelligently at the evils they endure and the mode of redress, and feel they have the power to remove their grievances, they will most certainly unite their forces and march in solid column against the objective point of assault.

The history of the world is full of examples which compel us to make this prediction: If the artisans in earlier ages—if the plebeians of Rome—if the peasants of France—the agricultural laborers of Europe, could tie themselves together, in the strong bonds of efficient organization, with the agencies at their command, and effect the changes in government and society, they secured thereby; it needs but the persistent influence of the great awakening now in progress among Maryland and American farmers to accomplish results more glorious in legislation, and public morals, and government than any ever attained by any class combin-

ation recorded in history, and if the organization whose name forms the caption to this article shall prove true in its hour of conquest to the principles of justice and fraternity, the foundation stone upon which the proud Temple is now building its work, will receive the admiration of this and the grateful homage of succeeding generations, as one of the proudest intellectual structures reared by man.

You can take pride in this connection in pointing to the part which the Maryland Farmer has taken heretofore, most emphatically and unequivocally in disseminating the principles of political economy and topics which have become important and absorbing in late Grange discussions. You can point our granger friends to whole columns in repeated numbers and successive years, many years ago, in which you pointed out the time of action for farmers, and you may congratulate yourselves that at last a portion of the good results so far achieved is due to your preparatory efforts in the cause, long before the beautiful banner of organization was unfurled on the soil of Maryland. HOWARD.

AMONG THE GRANGES.

Brighton Grange, No. 60, Montgomery Co., Md., held its regular monthly meeting at its hall at Brighton, on March 7th, Wm. Isaac Hartsborne in the chair; E. M. Lansdale, Sec'y. Bro. W. J. Scofield, chairman of committee on proportionate representation, read an able and interesting report. He showed the agricultural population was over twenty three millions, (over 50 per cent. of the aggregate population), that the aggregate value of the property of the country is thirty billions, of which farmers own about 50 per cent., and that of the aggregate exports agriculture furnishes three-fourths; these figures indicate that farmers are entitled to one-half of the representation in the National Congress by virtue of their number, wealth and products, whereas there are but *three* farmers in Congress, or at most thirteen, as mentioned in the congressional directory. This exhibition of the inequality of representation—with ample taxation—is a startling feature in the situation and should summon farmers in all sections of the country to unite in giving proper equilibrium in all bodies which deliberate upon their interests. W. C. Gartrell, one of the committee, also spoke upon the question, and W. L. Stabler, the remaining member, also made a report which was ordered to be embodied in the report of the chairman and accepted, with the thanks of the Grange, as the report of the committee. A communication was received from the County Grange on county taxa-

tion and appropriately referred. Bro. S. S. Lansdale made some remarks upon the marketing of hay in Washington, and the injurious combinations against the farmers, there existing. It was suggested that the farmers build a market house for the sale of their produce and the accomodation of themselves and their teams while there. After the feast Bro. Charles Hartshorne made the report of the committee of the township system, which was accepted. This report showed the advantage of the system and advised its adoption for Maryland.

The Montgomery County Grange, No. 7, composed of delegates from the eight Subordinate Granges of the county, held its last meeting on Thursday, January 30th, at Olney Grange Hall, Mechanicsville. Bro. W. H. Farquhar made the address of welcome; and Bro. D. Lawrence, a delegate from Brighton, invited the Grange to hold its next meeting at Brighton Grange Hall, on April 24th. Bro. J. T. Moore, of Olney, introduced resolutions commending the Commissioner of Agriculture for the stand he has taken in proposing to distribute seeds to farmers, and not to politicians, and appointing a committee to visit the Department of Agriculture and confer with the Commissioner as to the best means of carrying out his plans; the resolutions were adopted. A question of political economy next came up, being the report of the committee on "the evils of the farmers' situation and the means of redress." In the absence of the chairman of the committee (Bro. Young), Bro. Farquhar read the report, which embodied resolutions, approving the action of the Farmers' Convention at Sandy Spring, which body had appointed a committee to enquire into the expediency of calling a county convention to meet at Rockville to investigate the present expenditure of the public fund and the means of reducing the burden of taxation. Bro. A. B. Davis spoke at length on the question, pointing out many items in which retrenchment could be advantageously effected. The question was debated by Bros. Magruder, Farquhar, Stabler, Lawrence, Tschiffely and others; the matter was finally sent back to the Sub. Granges for instructions to delegates to report at next meeting of the County Grange.

A committee was appointed, consisting of Bros. Magruder, Lansdale and Lawrence, to pay a visit of fraternal greeting to Howard Co. Grange, No. 8.

Howard County Grange, No. 8, held its regular quarterly meeting at Harban's School House, near Dayton, March 8th, W. H. O. Devries in the chair; E. M. Devillbiss, Sec'y. Delegation from several Montgomery County Granges were received and resented to the body.

Bro. Dawson Lawrence acted as installing officer in installing Bro. Harban and Sisters Harban and Musgrove for their respective offices. Discussion then arose on the resolutions of Bro. Wm. Clarke in the Limestone Valley Grange, looking to the calling of a county convention at Ellicott City to take action to reduce the taxes. The subject came before the body regularly in the shape of a resolution presented by Bro. John R. Clark, calling a meeting of taxpayers to be held at Ellicott City the last Saturday in May to consider the subject of taxation and devise means for the reduction of the burden we now bear. This was debated by Bros. Wm. Clark, Hardy, David Clark Poe, John R. Clark, the Worthy Master and others, and passed unanimously. Bros. Clarke, Gartrell, and Lawrence, also spoke briefly on the general principles of political economy. A resolution was also passed, appointing a committee to agitate the question of a county convention in the county press. The day was cloudy and rainy, the roads rough and muddy, and the place of meeting on the western border of the county and consequently a small attendance was anticipated, but on the contrary every Grange in the county was represented; the meeting was a very large one, the room being full, and every member, but one, of two visiting delegations from an adjoining county was present, combining to make one of the most interesting and best attended meetings ever held in the county, showing the great value of the individual attendance of members when the time comes, regardless of work or weather. The Grange adjourned to meet on the second Saturday in June, 1879.

Library for the People.

In another column will be found the advertisement of H. W. Derby & Co., of Columbus, O., proprietors of the People's Library. The collection of the People's Library is a happy thought. The books are judiciously selected and furnished at a low cost, and will be extensively purchased by all classes to whom good books are a necessity. The books are printed and bound in the best style, and the appearance of the whole collection of one hundred volumes is at once pleasing and attractive. The works of the best-known and most popular writers have been carefully examined, and some of their choicest productions have thus been selected for a place in the People's Library. As a collection designed to meet the popular taste, this library stands unequalled. The freshest, and the best of whatever belongs to every department of knowledge may be found in the 45,200 pages of reading matter contained in the one hundred volumes.

OUR REPLY.

The *American Farmer* for March has another long article villifying us, full of false and malicious statements and deceptions, which, our respect for public opinion seems to require us to expose, although we dislike to come in contact with such low vulgarity. If some of our readers are annoyed by this, we ask to be excused, because we did not provoke the quarrel, and we have been shamefully abused and misrepresented, and must defend ourselves. Some have said "take no notice—these dirty insults are too contemptible for gentlemen to reply to," but we can't sit calmly by and see a sneak enter our house with a view to rob, and say "go on, help yourself, you are too mean and low for me to dirty my hands with." On this principle of self-defence, we feel bound to expose these people, though some of our readers may consider it to be in bad taste. Those who conduct the *American Farmer* seem fortunate in having two informants, who are ever ready to furnish "on call," or manufactured to order, any proof that may be wanted.

Here is a specimen, Sands says—"We have had placed in our hands by the representatives of Col. Mills, original papers which show how much Mr. Whitman "relieved him from his embarrassments, &c." If this published statement were true, it only goes to prove how remunerative Col. Mills' connection with E. Whitman had been, and his willingness to acknowledge his obligations by any favor he could do. But the evidences of indebtedness, which are paraded by these harpies, show no such individual indebtedness as is asserted. The statement as made is false. Now, this very informant said to be a representative of Col. Mills, who proffered his services to assist the compilers of that veracious diatribe, to talk so flippantly about failures and bankruptcies, strange as it may appear, only a few years since, at the head of a firm, failed and settled with his creditors at 50 cents on the dollar, and lately failed again and is just released by bankruptcy. This is referred to, not to show that there was anything wrong in his going into bankruptcy, but to show that *he* has done just what he wants to help Messrs. Sands prove was a heinous offence in others. Pray, can this informant state how much money Col. Mills lost by him—that would help the much pitied family.

As to their other ungrateful informant, now so warm a sympathiser with the Sands, formerly professed loudly the greatest contempt for them.

In the last article, which seems to be the joint effort of father and son, it is stated that the elder Sands, at one time, wanted to negotiate for an in-

terest in the *MARYLAND FARMER*. We should not have alluded to this, but as he has introduced it, we now say, he did seem very anxious to buy an interest and become a partner in the *MARYLAND FARMER*, and made a liberal offer for a half interest. *We did not go to him, he solicited us.* Col. Mills, who knew the old man better than we did, informed us, that the object was to get the son in the business, and he wanted no such dead weight hanging about, for he had been a failure at everything he undertook, and thus the negotiation was broken up, and Mr. Sands then as a dernier resort, picked up the *American Farmer*, which he had sold for \$13,000 and then helped to ruin it, so that now he could buy it for \$5 or a mere pittance. This was the true origin of the re-suscitated, so-called *American Farmer*.

The junior editor, in whom now exclusively rests the "*proprietary*" of this hum-bug Journal, is disposed to indulge in a tirade against other people as "failures." This conceited youth, has failed in everything that he has undertaken, and as editor he is a still greater failure. There are some men that seem constituted with no brains to invent, or build up, but have alone the bump of destructiveness—their delight is in ruin—they are fated to fail in their own affairs and rejoice in any work of destruction, whether of public institutions, private enterprises or even individual pursuits and reputations. Poor mis-guided, ill-constituted, moral dyspeptics, who want company at any price in their misery.

The following is a specimen of their style of argument:

"Concerning advertisements:—the *MARYLAND FARMER* makes a comparison of those in its pages with ours. It claims "more than double" ours. By reference to its back numbers, we find there advertisements of the "editor and proprietor," and of "his sisters and his cousins and his aunts," advertisements, "dead" and "deadhead;" advertisements paid for in cork-screws or dinner-tickets, cradles or bull-purps."

We presume no respectable man will expect us to reply to this, except by a flat contradiction. If we were forced to reply to this, we confess that we are too "illiterate," and perfectly ignorant in the common slang of ribald black-guardism to respond in similar style and language.

Now this is not only low scurrility, but insulting to our advertisers, and them we will answer for, by saying that we know of no paper in the country, which has a better list of advertisers than we have. Their names and articles advertised speak for their highly respectable character. Our advertisers combined, represent a wealth, estimated at over \$5,000,000, and they are sensible business

men, who know where to place their advertisements, so as to be most advantageous. Can any decent man read the abusive articles in the so-called *American Farmer*, and approve of its course or admire its chaste language? The very desperation exhibited by these untrue statements, shows how galling it is to those envious souls, that our circulation and advertisements, should double theirs, and hence they attempt the line of ridicule in which they fail, as they do in all other matters, to bring us in bad odor with advertisers, that they may become sole possessors of this profitable department of our Journal.

Another deceptive dodge these high-toned editors resort to. They write fulsome puffs of the *American Farmer*, and rely upon the kindness of local newspapers to publish them as quasi editorials—We find the same flattering notice, word for word in many of our exchanges, except those who do not admit its being the "old Pioneer," and expunge that boast from the stereotyped notice. In many of the same Journals we find complimentary notices of the MARYLAND FARMER, for which we are grateful to our contemporaries for their *voluntary* and *unsolicited* praise—Some few of which we publish in this number of the MARYLAND FARMER.

We showed in our March number, how deceptive was the title of "*The American Farmer*, established in 1819"—and since our March number appeared, we have had scores of gentlemen thank us for our exposure of that deceit, and to confirm our suppositions that many took that paper under the full belief that the elder Sands had been connected with the so-called *American Farmer*, as printer, publisher or editor, for sixty consecutive years. One gentleman connected with a very prominent Southern newspaper, said they had for several years exchanged with that paper under the impression it was the old *American Farmer*, "established in 1819." Several have said that they subscribed for it because they thought it was the same old paper that Skinner started, for it had little else to recommend it besides its supposed age and uninterrupted continuance.

Mr. Sands, Sr., seems surprised that allusion should be made to "ill-gotten wealth." If his memory is treacherous, his conscience, if he has any, would inform him that the expression was used in reference to his selling his darling founding—*The American Farmer*—for \$13,000, and directly starting another journal in opposition, against the *implied*, if not expressed understand-

ing between himself and the gentleman to whom he sold his paper for this large sum, and by his efforts so far as possible to break up the *American Farmer*, that he could in a few years get back for \$5, or some trifle, the same journal he sold for \$13,000. Again, does he forget that a portion of "competency" was made of profits from the sale of guano to a generous set of patrons, whom he ungratefully did his best, afterwards, to harass and ruin, under the cover of "loyalty?"—a cloak that in those troublous times was often worn to conceal sinister motives and unworthy designs.

Feeling how disgraceful it was to start the *Rural Register* under the circumstances attending the sale of the *Farmer* to Mr. Worthington, he meanly tries to throw the odium upon his dead nephew, and asserts unblushingly it was done at "*Mr. M's earnest solicitation*," and "was discontinued only when he (Mr. M.) became so embarrassed that he was no longer able to continue to print it." This is not only, we believe, untrue but an ungracious insult to the memory of a noble gentleman, who if living, would scorn such an imputation, for oftentimes he has expressed to his friends his regret that his uncle started the "*Rural Register*" and run it in opposition to the very paper he had so lately sold to another.

As to the boast of his generosity to Col. Mills, and that he held the "respect, confidence and affection of Col. M. to his dying day" it is hard to make the intimate friends of Col. M. believe this statement, they having good reasons to infer the contrary.

The writers of this scurrilous attack upon us, say—"though they (we) may not know and appreciate it, there is such a thing as "*character*." We do know and appreciate an honorable character, but we spurn such a character as they have won for vulgarity and low abuse, as shown in the manner they have conducted this controversy.

It is refreshing to hear a man "well nigh four score years," in concluding so abusive and unjust a tirade against his neighbors, pharisaically vaunt his many charities, and complacently rest satisfied that the "prayers of many a widow and orphan have gone up in our (his) behalf, and the gratitude of numerous friends who have received our aid and assistance in their struggles in life, will be freely bestowed."

What a striking picture!—this venerable Pharisee solemnly praying, "God I thank thee, I am not as other men are, extortioners, unjust, adulterers, or even as these Publicans—(meaning the poor sinful editors of MARYLAND FARMER.) I fast twice a week, *I give tithes of all I possess.*" Amen!

Our thanks are due to the *Woodberry News* for its frank and manly approval of our defense, against the attack of the *American Farmer*, and we give it here:—

"The *Maryland Farmer* and the so-called *American Farmer*, a pirate sailing under a stolen name, and edited by an old fossil who has laid treasures upon earth, are having quite a controversy. In the last issue of the *Maryland Farmer*, the editor of that high-toned and honorable journal shows up his piratical adversary in its true light. Many of the facts stated by the editor of the *Maryland Farmer*, in regard to the *American Farmer*, are known to us to be true. We know that Mr. Sands sold out the *American Farmer*, and then started the *Rural Registrar* in direct opposition to the *Farmer*, and after the death of the *Registrar*, which died for the want of brains, he started an entirely new paper, and called it the *American Farmer*. He had no more right to the name of "The *American Farmer*" than we had. We congratulate our valuable exchange, the *Maryland Farmer*, upon his well merited success. We hope it may continue in its prosperous course. It is a journal that the farmers of Maryland should delight to honor and support."

Incidentally we are also supported in our views as to the name of "*American Farmer*" expressed in our March number, by the following paragraph we find in a late number of the *Anne Arundel Advertiser*, edited by those old and accomplished editors, Messrs Iglehart & Riley.

NEWSPAPERS.—In 1775 there were but two Newspapers printed in Maryland, and one was the old *Maryland Gazette*, printed in Annapolis, (not the present 'Maryland Gazette,') which ceased to exist, we believe, in the year 1839. The present "Gazette," was started about twelve years ago, and therefore isn't a continuation of the old *Gazette*, in any sense whatever.

We call attention to the advertisement of Rafferty & Williams, a large manufacturing Company in New York, who have now a branch house in this city on Smith's Wharf. This firm has great facilities for the manufacturing of bones and blood into different fertilizers which they guarantee as to the ingredients said to be used in each according to the brand. Their fertilizers are made from the vast quantities of bone, blood and sweepings of the largest slaughter houses in New York. They have Ammoniated Bone Superphosphate, Dissolved Animal Bones, Bone Meal and Bone Flour, suited to different crops, and give a guarantee that the article sold will come up to the analysis as published.

A CARD.

A duty I owe to myself and respect for public opinion, require a short reply to the charges, affecting my personal character, which appeared in the March number of the scurrilous "*American Farmer*."

The only causes, I know of, that have stirred the conductors of that Journal to pour out their vials of wrath upon my devoted head are, *first*: In publishing a History of the Maryland Agricultural Society, at the suggestion of some of the old members, I left out of my record the fact that the Society on one occasion presented a silver goblet with some gold pieces in it, as a recognition of Mr. Sands' gratuitous services as Secretary of the Society. I omitted to do so, out of no ill feeling to Mr. S., but I really did not believe it was of any such consequence as would be looked upon, as a falsification of the record of the most important transactions of the Society. I thought it would be of little interest to the public of to day, whether or not the Society paid its Secretary a salary or by a complimentary donation.

My second offence to these persons was, my branding as a *plagiarism*, in part, the Essay of Mr. Stabler, which they raked from the debris of the past and set before the public as a precious jewel to deck their Journal, whose title is *itself a plagiarism*.

They exposed their egotism and ill-breeding in their remarks about the omission in the History, and utterly failed to disprove the alleged plagiarism. Their wrath seemed monthly to wax warmer against the MARYLAND FARMER, and at last, culminated in the March number, into a stream of the lowest personal abuse against the Editor and myself. The former has taken care of himself in this number and I choose to reply for myself individually.

In the last joint production of the father and son, there is this paragraph:

"So, too, the "associate editor"—who writes, of course, this chaste editorial we are noticing—is likewise indebted to Col. Mills' estate for a sum borrowed for a purpose which would have induced a man of instincts of honor to any exertions to repay; but this "low churl compact of thankless earth," himself a failure as a farmer, a failure as a lawyer, and a failure as an editor, forgets this at the nod of a master more illiterate but more cunning than himself, and snaps at the heels and tries to belittle men more successful than himself, ready to do any dirty work lest he meet the fate of his former associate—who had the manliness to speak the truth—and lose, as once before, his servile place."

The impression intended to be made is that the "sum borrowed" of Col. Mills, was a large one,

and for a "purpose" of such a character that it might be injurious to my character to have it named, and therefore, if I have any "instincts of honor," I should make "any exertions to repay." Col. Mills' estate holds my note for \$76.50, on which I am entitled to a credit of \$25.00, and on the balance I have paid the interest to the first of March. Two months before my friend's death, I wanted \$75, Col. M. knowing my affairs, for we were as intimate as brothers, volunteered to advance it.

The "representative" of the estate, is satisfied that what I owe will certainly be paid. I owe some other trifling amounts, and will be happy to give a list of them to their *detective* and man of all work if it will give them any pleasure.

But what has my small debts to do with my ability and efficiency as an Editor? In these days it is no *crime* to be in debt. Do neither of these men owe anybody any amount? Is it decent to allude to another's small debts? Does any respectable man in this country countenance this disreputable conduct of these men?

As to a *failure* in farming, hundreds will testify that charge is untrue. I sold my farm to pay the debts of friends for whom I went security, and who, while honest and honorable, were owing to the results of the war, unable to relieve me from the responsibilities incurred. Their property was taken from them by the earnest efforts of these same Messrs. Sands, who now have the effrontery to beg the Southern people for their patronage and support. I never expected to be forced to say why I sold my old homestead, for the improvement and successful management of which I received from the Agricultural Society of Prince George's County, the third, second and finally the *first* Premiums, for the *best managed farm* in that county; at that time, the banner county of State. At that time my "old friend" S. Sands, was jubilant over my "deserved" success, and now, he and his hopeful son say I have been a "*failure as a farmer*." As long as I wrote for his Journal, it will be seen by reference to its volumes, that the elder Sands often bestowed high praise, and sometimes strong *adulation* upon me as an exemplar in agricultural pursuits.

Solely because I am connected with the MARYLAND FARMER,—the success of which is wormwood and gall to their envious souls—these vampires endeavor to close every avenue, by which I can gain an honorable livelihood, in mine old age.

To the charge of being "a failure as a lawyer," I appeal to my professional brothers, with whom I have at different times been connected in cases,

some of which have been of great importance and notoriety, and to many learned Judges that are now living, before whom I have tried cases coming under all the different branches of the civil and criminal law—let Messrs. S. go to *them* for proof. Surely the whole bar of Maryland or any one of them are more competent to say whether I have been "a failure as a lawyer," than these conceited libellers.

That I am a "a failure as an Editor," it becomes me not to reply, save to say that our numerous readers and a host of our Editorial brothers in and out of the State have laid the MARYLAND FARMER, of which I have been for some years the "associate editor," under many obligations for their *unsolicited* cordial approval and flattering compliments.

As to what they say of my being "ready to do any dirty work" at the "nod of a master," I do not condescend to reply to such ignoble calumnies. I value my recognized character as an honorable Southern *gentleman* too highly to touch *pitch*.

This mendacious pair, deserve credit for the gift of condensation, for certainly such a number of falsehoods were never before packed in one short paragraph as in the one quoted above. They have reduced the whole of Munchausen into a few words. A lawyer would require pages of legal cap to set forth in an indictment the several counts that are included in their terrific presentment.

I am content that the sanctimonious Samuel should "rest satisfied" that the prayers of many a widow and orphan *have* gone up in our (his) behalf," for I am younger and less pretentious than he, therefore, feel happy in the enjoyment of their present approving smiles and cheering cheers.

I have now done with these unworthy men, and shall give them no further notice, unless I determine to resort to other means to settle this difficulty more satisfactory than idly bandying words.

W. W. W. BOWIE.

BAYLIES PATENT WHEEL HARROW, is advertised in this number, and is perhaps the best harrow for sod ground that has yet been invented. Unlike the common drag, it operates with 12 discs, that act as so many little plows. We heartily commend it to public notice.

T. J. IRVING, offers in his advertisement, Paris, French dress shirts, which are claimed to be the best finished shirts in the market, and at the most reasonable prices.

PUBLICATIONS RECEIVED.

From U. S. Department of Agriculture.—Manual of Instructions for Production of Silk, entitled "The Silk Worm"—Very valuable to all who wish to engage in silk making, prepared by Mr. Riley, Entomologist, and reported to commissioner Le Duc.

Annual Report of the Connecticut Agt. Experimental Station for 1878—We shall refer to this more at length in future.

Fish Culture in N. Carolina.—A very interesting report of Mr. S. Worth, Fish Commissioner, to Hon. L. L. Polk, Com. of Agl., of N. C. We shall soon gratify our readers by giving extracts from this pamphlet.

Result of Soil Tests for 1878.—Report of Thos. P. Janes, Com. of Agl. for Georgia.

Rhymes of Science, a neatly printed collection of amusing Rhymes, by learned men, in which great principles of science are announced, or the occult mysteries of nature are pointed out—Published by the Industrial Publishing Co., N. Y.

Chemical Farming, its Possibilities and Mistakes, Price 25 cents. This excellent little work is written by the well known writer, Conrad Wilson, Esq., and published by the "Farmer's Publishing Co.," N. Y. This is one of a series of books upon various subjects of the highest importance to the farmer, and placed at such low rates, as to be available to all. The company seem desirous to aid agricultural progress, by the dissemination of useful knowledge, at the lowest cost, to such as wish to avail themselves of sound instruction.

The Art of Propagation, by J. Jenkins. Winona, Ohio. Price 50 cents. A capital compendium, or hand book for everybody who wants to learn the art of propagating flowers, fruit and vegetables, in a simple and easy way—We recommend it.

New and Rare Fruits for 1878, by William C. Barry. This is a very instructive paper, read by the distinguished author, before the Western N. Y. Horticultural Society, Jan. 23, 1879.

Vick's Illustrated Monthly Magazine, for April, is promptly as usual on hand, and is more beautiful than any which has pre-ceded it. The first number we thought could not be exceeded in beauty of illustrations, typography and interesting instructions, but each month it surpasses former efforts—April number is full of fine wood cuts, with a brilliantly painted group of Pansies for a frontispiece. The flowers are colored as natural as life. Price only \$1 25 per year.

Chew Jackson's Best sweet Navy Tobacco,

CATALOGUES RECEIVED.

Purdy's Fruit Farm and Nurseries. We have received from A. M. Purdy, Palmyra, N. Y., a very instructive 20-page pamphlet, telling how to grow small fruits successfully, describing sorts, &c., &c. He sends it free to all applicants, as also a specimen copy of his monthly paper, and fruits, and flowers.

John Saul's splendid Catalogue of new, rare and beautiful plants for 1879—Washington City.

From A. Hance & Son, Catalogue of ornamental Trees and Plants.

From Cromwell & Congdon, Seedsmen and Florists, Baltimore, Md. This is the most complete and carefully prepared Catalogue of Flower and Vegetable Seeds, Plants, &c., ever issued in Maryland. It is pretty illustrated and neatly gotten up—It reflects great credit upon the taste and industry of this well known house.

T. J. WARREN offers Lee's Prepared Agricultural Lime at so low a price and with such testimonials that farmers would do well to consider its claims before investing in higher priced fertilizers.

R. Q. TAYLOR & Co., offer at this elegant Hat establishment, every style of fashionable Hats, Caps, &c., at prices to suit the times. This is an old house, and long known as the great emporium of fashion in Hats, Furs and like articles.

J. PELS Shoe House, on Eutaw St., is one of the most elegant and fashionable Shoe houses in the city. Ladies Shoes are a specialty. The beautiful assortment they exhibit, attract crowds. The prices are very reasonable, for the quality and beauty of their work.

NEW ADVERTISEMENTS.

F. C. Biddle, Brandywine Nursery.

Verry & Harper, Hearing restored.

W. H. Cummins, Plymouth Rocks.

A. F. Hofer & Sons, Book on Grapes.

W. W. W. Bowie, Tree Agency.

Heebner & Sons, Horse Powers.

Miss A. Rutledge, Bees in Hives.

J. Pells & Sons, Shoes, &c.

J. H. Buxton, Eclipse Wind Mill.

E. D. Hallock, Corn and Seed Drills.

R. Q. Taylor, Fine Hats, &c.

E. Baylies, Harrows

A. J. Wedderburn, Fertilizers for Special Crops.

Rafferty & Williams, Fertilizers.

T. J. Irving, Shirts.

The Great American Tea Company.

Alex. J. Wedderburn offers "Ceres Top Dresser," for grass and cereals, as the cheapest manure in the market, and one of the best for top-dressing. It contains lime, magnesia, salt, potash and bone phosphate